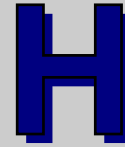


# AMERICAN CAPACITOR CORPORATION

ENGINEERING DATA SHEET

METALLIZED POLYCARBONATE CAPACITORS

SERIES



## ENVIRONMENTAL DATA

### APPLICATIONS

Series H Metallized Polycarbonate capacitors have superior electrical properties. They are dry-section, non-polar, non-inductive wound capacitors with low Dissipation Factor, low Dielectric Absorption, high Insulation Resistance and a low Temperature Coefficient.

Series H Capacitors come in several styles: Oval Wrap & Fill (HW Style); Round Wrap & Fill (HR Style); Axial Epoxy Case (HE Style); Radial Epoxy Case (HF Style); Rectangular Hermetically Sealed (HG Style); Round Hermetically Sealed (HL Style). They are available in several sizes including Regular (3 Size code) and Miniature (2 Size code) as well as custom sizes to meet specific customer requirements.

Contact our Engineering Department for special sizes, configurations, capacitance values and AC applications with Anti-Corona construction at all frequencies. Custom metal enclosures are available. Custom designed Feed Through capacitors (HQ Style) are also available for filter applications to specific requirements.

### OPERATING TEMPERATURE RANGE

Range: -55°C to +125°C, without voltage derating.

### LIFE TEST

Series H capacitors shall be capable of withstanding a test of 1000 hours at 125°C and 100% of the DC rated voltage or a test of 250 hours at 125°C and 140% of the DC voltage. The voltage shall be applied to each capacitor through its individual current-limiting resistor as determined from the formula  $R = 0.025/C$ , where C is the nominal capacitance in farads and R is in ohms. The test procedures shall be in accordance with MIL-C-18312, except as noted herein. Not more than one failure in twelve shall be permitted. Any one of the following shall be considered a failure.

- A change in capacitance of more than 10% from it's initial value.
- An increase in Dissipation Factor to a value greater than 150% of the acceptance limit.
- A decrease in Insulation Resistance to a value less than 30% of the acceptance limit for 25°C.
- A permanent short or open.

### VIBRATION

Series H capacitors shall be capable of withstanding a vibration test in accordance with MIL-STD-202, Method 201. The following details and exceptions shall apply:

a. **Mounting.** The capacitor body shall be rigidly mounted by the entire body length to the vibration test fixture. The leads shall be soldered to rigidly supported terminals and so spaced that the length of each lead from the capacitor is  $1/2 \pm 1/8$  inch from the edge of the supporting terminal.

b. **Measurement during Vibration.** During the last cycle in each direction, an electrical measurement shall be made to detect intermittent contacts (not to be confused with "self healing" clearings) or open or short circuiting.

c. **Examination After Vibration.** Capacitors shall be visibly examined for evidence of mechanical damage.

### MOISTURE RESISTANCE

Series H capacitor Styles HG and HL (hermetically sealed in metal containers) shall be capable of withstanding the moisture resistance, humidity, and temperature and immersion cycling or MIL-C-18312. Styles HE and HF (epoxy encased) and Style HW (wrap & fill) capacitors are not intended for exposure to high humidity conditions over extended periods of time.

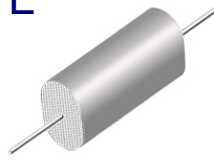
### TERMINAL STRENGTH

Series H capacitors utilize tin-plated, copper-clad steel wire terminals which shall be capable of withstanding the following test without mechanical damage to the capacitor or terminals:

a. **Pull Test.** The capacitor shall withstand a steady pull of 5 pounds axially to the leads for 1 minute.

b. **Bend Test.** The wire lead terminals shall be bent at a point of 1/4 inch from the body of the capacitor, first 90 degrees in one direction, then back to the original position, and then 90 degrees in the opposite direction.

# METALLIZED POLYCARBONATE WRAP AND FILL, OVAL AXIAL LEAD CAPACITORS



**HW3**  
METALLIZED POLYCARBONATE  
WRAP & FILL, OVAL  
REGULAR SERIES

## ORDERING DESCRIPTION

Capacitor, fixed: Metallized Polycarbonate dielectric; extended foil construction; tin-plated copper-clad steel wire axial leads; encased in skin-tight plastic wrap with epoxy end fill.

## APPLICATION NOTES

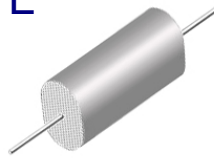
Wrap & Fill capacitors are not intended for exposure to high humidity conditions over extended periods of time. For stringent environmental conditions, Wrap & Fill capacitors should be used in encapsulated or hermetically sealed circuitry.

## SELECTION AND ORDERING TABLES Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	35VDC 20VAC				50VDC 40VAC				100VDC 70VAC				200VDC 120VAC			
	T		W		L		PART #		T		W		L		PART #	
	+ .05"	+ .05"	± .05"		+ .05"	+ .05"	± .05"		+ .05"	+ .05"	± .05"		+ .05"	+ .05"	± .05"	
.001	.09	.18	.40	HW3S102K	.09	.18	.40	HW3C102K	.09	.18	.40	HW3D102K	.09	.18	.40	HW3E102K
.0027	.09	.18	.40	HW3S272K	.09	.18	.40	HW3C272K	.09	.18	.40	HW3D272K	.09	.18	.40	HW3E272K
.0033	.09	.18	.40	HW3S332K	.09	.18	.40	HW3C332K	.09	.18	.40	HW3D332K	.09	.18	.40	HW3E332K
.0056	.09	.18	.40	HW3S562K	.09	.18	.40	HW3C562K	.09	.18	.40	HW3D562K	.09	.18	.40	HW3E562K
.0068	.09	.18	.40	HW3S682K	.09	.18	.40	HW3C682K	.09	.18	.40	HW3D682K	.09	.18	.40	HW3E682K
.0082	.09	.18	.40	HW3S822K	.09	.18	.40	HW3C822K	.09	.18	.40	HW3D822K	.09	.18	.40	HW3E822K
.01	.09	.18	.40	HW3S103K	.09	.18	.40	HW3C103K	.09	.18	.40	HW3D103K	.10	.23	.40	HW3E103K
.012	.09	.18	.40	HW3S123K	.09	.18	.40	HW3C123K	.09	.18	.40	HW3D123K	.10	.23	.40	HW3E123K
.015	.09	.18	.40	HW3S153K	.09	.18	.40	HW3C153K	.09	.18	.40	HW3D153K	.11	.24	.40	HW3E153K
.018	.09	.18	.40	HW3S183K	.09	.18	.40	HW3C183K	.09	.18	.40	HW3D183K	.12	.25	.40	HW3E183K
.022	.09	.18	.40	HW3S223K	.09	.18	.40	HW3C223K	.09	.18	.40	HW3D223K	.14	.27	.40	HW3E223K
.027	.09	.18	.40	HW3S273K	.09	.18	.40	HW3C273K	.09	.22	.40	HW3D273K	.10	.24	.53	HW3E273K
.033	.09	.18	.40	HW3S333K	.09	.18	.40	HW3C333K	.10	.23	.40	HW3D333K	.12	.25	.53	HW3E333K
.039	.09	.18	.40	HW3S393K	.09	.18	.40	HW3C393K	.11	.24	.40	HW3D393K	.13	.26	.53	HW3E393K
.047	.09	.18	.40	HW3S473K	.09	.18	.40	HW3C473K	.09	.22	.53	HW3D473K	.14	.27	.53	HW3E473K
.056	.09	.18	.40	HW3S563K	.09	.19	.40	HW3C563K	.09	.22	.53	HW3D563K	.16	.29	.53	HW3E563K
.068	.09	.18	.40	HW3S683K	.10	.20	.40	HW3C683K	.10	.23	.53	HW3D683K	.18	.31	.53	HW3E683K
.082	.09	.18	.40	HW3S823K	.11	.21	.40	HW3C823K	.11	.24	.53	HW3D823K	.20	.33	.53	HW3E823K
.10	.09	.18	.40	HW3S104K	.13	.22	.40	HW3C104K	.12	.25	.53	HW3D104K	.22	.35	.53	HW3E104K
.12	.09	.18	.40	HW3S124K	.14	.24	.40	HW3C124K	.14	.27	.53	HW3D124K	.25	.35	.53	HW3E124K
.15	.09	.18	.40	HW3S154K	.11	.21	.53	HW3C154K	.16	.29	.53	HW3D154K	.22	.36	.65	HW3E154K
.18	.10	.20	.40	HW3S184K	.12	.22	.53	HW3C184K	.17	.30	.53	HW3D184K	.24	.37	.65	HW3E184K
.22	.11	.22	.40	HW3S224K	.13	.23	.53	HW3C224K	.19	.32	.53	HW3D224K	.27	.40	.65	HW3E224K
.25	.12	.22	.40	HW3S254K	.14	.24	.53	HW3C254K	.16	.29	.65	HW3D254K	.24	.37	.78	HW3E254K
.27	.13	.22	.40	HW3S274K	.15	.25	.53	HW3C274K	.17	.30	.65	HW3D274K	.25	.38	.78	HW3E274K
.33	.15	.24	.40	HW3S334K	.17	.26	.53	HW3C334K	.19	.32	.65	HW3D334K	.27	.43	.78	HW3E334K
.39	.16	.25	.40	HW3S394K	.18	.28	.53	HW3C394K	.21	.34	.65	HW3D394K	.29	.45	.78	HW3E394K
.47	.18	.28	.40	HW3S474K	.20	.30	.53	HW3C474K	.20	.33	.78	HW3D474K	.33	.49	.78	HW3E474K
.50	.11	.21	.53	HW3S504K	.21	.31	.53	HW3C504K	.20	.33	.78	HW3D504K	.34	.50	.78	HW3E504K
.56	.12	.22	.53	HW3S564K	.22	.32	.53	HW3C564K	.21	.34	.78	HW3D564K	.30	.46	.97	HW3E564K
.68	.13	.23	.53	HW3S684K	.25	.35	.53	HW3C684K	.24	.37	.78	HW3D684K	.34	.50	.97	HW3E684K
.75	.14	.24	.53	HW3S754K	.26	.36	.53	HW3C754K	.25	.38	.78	HW3D754K	.36	.52	.97	HW3E754K
.82	.15	.24	.53	HW3S824K	.22	.31	.65	HW3C824K	.25	.41	.78	HW3D824K	.32	.48	1.17	HW3E824K
1.0	.17	.26	.53	HW3S105K	.24	.34	.65	HW3C105K	.23	.39	.97	HW3D105K	.36	.52	1.17	HW3E105K
1.2	.19	.28	.53	HW3S125K	.21	.33	.78	HW3C125K	.24	.39	1.17	HW3D125K	.30	.48	1.68	HW3E125K
1.5	.22	.31	.53	HW3S155K	.24	.36	.78	HW3C155K	.25	.41	1.17	HW3D155K	.33	.51	1.68	HW3E155K
1.8	.25	.34	.53	HW3S185K	.30	.36	.78	HW3C185K	.28	.44	1.17	HW3D185K	.38	.54	1.68	HW3E185K
2.0	.26	.35	.53	HW3S205K	.31	.39	.78	HW3C205K	.30	.46	1.17	HW3D205K	.41	.57	1.68	HW3E205K
3.0	.25	.35	.65	HW3S305K	.31	.43	.97	HW3C305K	.38	.54	1.17	HW3D305K	.51	.65	1.68	HW3E305K
4.0	.25	.35	.78	HW3S405K	.31	.43	1.17	HW3C405K	.37	.51	1.68	HW3D405K	.57	.80	1.68	HW3E405K
5.0	.28	.38	.78	HW3S505K	.34	.46	1.17	HW3C505K	.39	.55	1.68	HW3D505K	.65	.87	1.68	HW3E505K
6.0	.31	.42	.78	HW3S605K	.39	.52	1.17	HW3C605K	.44	.59	1.68	HW3D605K	.73	.97	1.68	HW3E605K
8.0	.32	.42	.97	HW3S805K	.44	.56	1.17	HW3C805K	.50	.66	1.68	HW3D805K	.82	1.09	1.68	HW3E805K
10.0	.37	.46	.97	HW3S106K	.50	.62	1.17	HW3C106K	.54	.76	1.68	HW3D106K	.90	1.22	1.68	HW3E106K
12.0	.30	.48	1.17	HW3S126K	.55	.69	1.17	HW3C126K	.60	.81	1.68	HW3D126K	.84	1.08	2.25	HW3E126K
15.0	.35	.51	1.17	HW3S156K	.48	.60	1.68	HW3C156K	.68	.90	1.68	HW3D156K	.95	1.19	2.25	HW3E156K
20.0	.41	.57	1.17	HW3S206K	.54	.69	1.68	HW3C206K	.78	1.00	1.68	HW3D206K	1.12	1.36	2.25	HW3E206K
30.0	.52	.69	1.17	HW3S306K	.64	.79	1.68	HW3C306K	.97	1.20	1.68	HW3D306K	1.36	1.61	2.25	HW3E306K
40.0	.61	.78	1.17	HW3S406K	.73	.87	1.68	HW3C406K	.95	1.19	2.25	HW3D406K	1.28	1.52	3.25	HW3E406K
50.0	.69	.86	1.17	HW3S506K	.82	.98	1.68	HW3C506K	1.06	1.30	2.25	HW3D506K	1.43	1.67	3.25	HW3E506K
75.0	.72	.91	1.45	HW3S756K	.99	1.19	1.68	HW3C756K	1.31	1.55	2.25	HW3D756K	1.75	1.99	3.25	HW3E756K
100.0	.84	1.03	1.45	HW3S107K	1.11	1.30	1.68	HW3C107K	1.52	1.76	2.25	HW3D107K	2.03	2.27	3.25	HW3E107K

Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches. All +.05" dimension tolerances are Maximum.

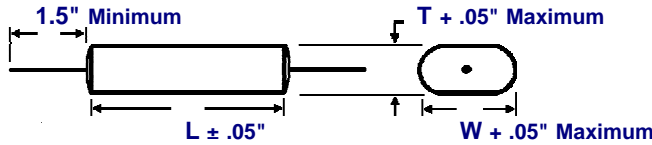
# METALLIZED POLYCARBONATE WRAP AND FILL, OVAL AXIAL LEAD CAPACITORS



**HW3**  
METALLIZED POLYCARBONATE  
WRAP & FILL, OVAL  
REGULAR SERIES

**DIMENSIONS** See tables for specific T, W, L values.

**WIRE SIZE** (Length 1.5" Minimum)



BODY LENGTH (L)	WIRE SIZE	
	AWG No.	Diameter
≤ 0.65"	24	0.020"
> 0.65" ≤ 1.00"	22	0.025"
> 1.00"	20	0.032"

**SELECTION AND ORDERING TABLES** Select voltage rating, capacitance and tolerance, read Part Number to the right.

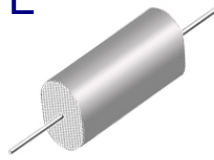
MFD	400VDC 230VAC				600VDC 275VAC				1000VDC 480VAC				1500VDC 750VAC				
	RATING	T	W	L	PART #	T	W	L	PART #	T	W	L	PART #	T	W	L	PART #
	+ .05"	+ .05"	± .05"		+ .05"	+ .05"	± .05"		+ .05"	+ .05"	± .05"		+ .05"	+ .05"	± .05"		+ .05"
.001	.09	.18	.40	HW3G102K	.09	.18	.40	HW3J102K	.14	.23	.97	HW3M102K	.14	.23	.97	HW3P102K	
.0012	.09	.18	.40	HW3G122K	.09	.18	.40	HW3J122K	.14	.23	.97	HW3M122K	.14	.23	.97	HW3P122K	
.0015	.09	.18	.40	HW3G152K	.09	.18	.40	HW3J152K	.14	.23	.97	HW3M152K	.14	.23	.97	HW3P152K	
.0018	.09	.18	.40	HW3G182K	.09	.18	.40	HW3J182K	.14	.23	.97	HW3M182K	.14	.23	.97	HW3P182K	
.0022	.09	.18	.40	HW3G222K	.09	.18	.40	HW3J222K	.15	.24	.97	HW3M222K	.15	.24	.97	HW3P222K	
.0027	.09	.18	.40	HW3G272K	.09	.18	.40	HW3J272K	.15	.24	.97	HW3M272K	.19	.27	.97	HW3P272K	
.0033	.10	.19	.40	HW3G332K	.10	.19	.40	HW3J332K	.15	.24	.97	HW3M332K	.21	.30	.97	HW3P332K	
.0039	.10	.19	.40	HW3G392K	.10	.19	.53	HW3J392K	.15	.24	.97	HW3M392K	.23	.32	.97	HW3P392K	
.0047	.10	.19	.40	HW3G472K	.10	.19	.53	HW3J472K	.16	.25	.97	HW3M472K	.25	.34	.97	HW3P472K	
.0056	.10	.19	.53	HW3G562K	.10	.19	.53	HW3J562K	.16	.25	.97	HW3M562K	.27	.36	.97	HW3P562K	
.0068	.11	.20	.53	HW3G682K	.11	.20	.53	HW3J682K	.17	.26	.97	HW3M682K	.31	.40	.97	HW3P682K	
.0082	.13	.26	.53	HW3G822K	.13	.26	.53	HW3J822K	.20	.30	.97	HW3M822K	.34	.43	.97	HW3P822K	
.01	.13	.26	.53	HW3G103K	.18	.31	.53	HW3J103K	.22	.32	.97	HW3M103K	.38	.47	.97	HW3P103K	
.012	.15	.28	.53	HW3G123K	.20	.33	.53	HW3J123K	.24	.34	.97	HW3M123K	.42	.51	.97	HW3P123K	
.015	.16	.29	.53	HW3G153K	.22	.35	.53	HW3J153K	.27	.37	.97	HW3M153K	.47	.56	.97	HW3P153K	
.018	.18	.31	.53	HW3G183K	.24	.35	.53	HW3J183K	.31	.41	.97	HW3M183K	.53	.62	.97	HW3P183K	
.022	.21	.34	.53	HW3G223K	.22	.35	.65	HW3J223K	.35	.45	.97	HW3M223K	.31	.55	1.31	HW3P223K	
.027	.23	.35	.53	HW3G273K	.25	.35	.65	HW3J273K	.37	.48	.97	HW3M273K	.35	.59	1.31	HW3P273K	
.033	.20	.33	.65	HW3G333K	.23	.36	.78	HW3J333K	.44	.53	.97	HW3M333K	.40	.65	1.31	HW3P333K	
.039	.22	.35	.65	HW3G393K	.25	.38	.78	HW3J393K	.48	.59	.97	HW3M393K	.44	.68	1.31	HW3P393K	
.047	.25	.35	.65	HW3G473K	.26	.42	.78	HW3J473K	.55	.64	.97	HW3M473K	.38	.65	1.68	HW3P473K	
.056	.23	.36	.78	HW3G563K	.29	.45	.78	HW3J563K	.32	.56	1.31	HW3M563K	.43	.70	1.68	HW3P563K	
.068	.25	.38	.78	HW3G683K	.33	.48	.78	HW3J683K	.35	.59	1.31	HW3M683K	.48	.75	1.68	HW3P683K	
.082	.27	.43	.78	HW3G823K	.36	.52	.78	HW3J823K	.39	.64	1.31	HW3M823K	.55	.82	1.68	HW3P823K	
.10	.30	.46	.78	HW3G104K	.36	.52	.97	HW3J104K	.45	.70	1.31	HW3M104K	.61	.87	1.68	HW3P104K	
.12	.33	.49	.78	HW3G124K	.32	.48	1.17	HW3J124K	.51	.75	1.31	HW3M124K	.72	.95	1.68	HW3P124K	
.15	.31	.47	.97	HW3G154K	.36	.52	1.17	HW3J154K	.59	.82	1.31	HW3M154K	.78	1.04	1.68	HW3P154K	
.18	.35	.51	.97	HW3G184K	.40	.56	1.17	HW3J184K	.65	.89	1.31	HW3M184K	.87	1.13	1.68	HW3P184K	
.22	.34	.50	1.17	HW3G224K	.45	.61	1.17	HW3J224K	.56	.80	1.68	HW3M224K	.97	1.23	1.68	HW3P224K	
.25	.36	.52	1.17	HW3G254K	.35	.56	1.68	HW3J254K	.60	.84	1.68	HW3M254K	1.05	1.30	1.68	HW3P254K	
.27	.38	.54	1.17	HW3G274K	.36	.58	1.68	HW3J274K	.62	.87	1.68	HW3M274K	1.10	1.35	1.68	HW3P274K	
.33	.42	.58	1.17	HW3G334K	.41	.62	1.68	HW3J334K	.70	.94	1.68	HW3M334K	.93	1.17	2.50	HW3P334K	
.39	.45	.62	1.17	HW3G394K	.45	.67	1.68	HW3J394K	.78	1.03	1.68	HW3M394K	1.02	1.26	2.50	HW3P394K	
.47	.51	.67	1.17	HW3G474K	.51	.72	1.68	HW3J474K	.87	1.12	1.68	HW3M474K	1.13	1.37	2.50	HW3P474K	
.50	.41	.57	1.68	HW3G504K	.53	.74	1.68	HW3J504K	.89	1.15	1.68	HW3M504K					
.56	.44	.60	1.68	HW3G564K	.56	.77	1.68	HW3J564K	.96	1.21	1.68	HW3M564K					
.68	.49	.65	1.68	HW3G684K	.56	.78	2.00	HW3J684K	1.08	1.32	1.68	HW3M684K					
.75	.51	.67	1.68	HW3G754K	.60	.81	2.00	HW3J754K	1.14	1.38	1.68	HW3M754K					
.82	.54	.70	1.68	HW3G824K	.58	.79	2.25	HW3J824K	1.19	1.43	1.68	HW3M824K					
1.0	.60	.76	1.68	HW3G105K	.65	.86	2.25	HW3J105K	.99	1.23	2.50	HW3M105K					
1.2	.65	.82	1.68	HW3G125K	.72	.93	2.25	HW3J125K	1.11	1.35	2.50	HW3M125K					
1.5	.72	.94	1.68	HW3G155K	.81	1.08	2.25	HW3J155K	1.24	1.48	2.50	HW3M155K					
1.8	.79	1.02	1.68	HW3G185K	.89	1.14	2.25	HW3J185K	1.35	1.59	2.50	HW3M185K					
2.0	.84	1.07	1.68	HW3G205K	.95	1.19	2.25	HW3J205K	1.43	1.67	2.50	HW3M205K					
3.0	1.06	1.27	1.68	HW3G305K	1.19	1.42	2.25	HW3J305K	1.46	1.71	3.25	HW3M305K					
4.0	1.04	1.26	2.25	HW3G405K	1.39	1.63	2.25	HW3J405K	1.70	1.94	3.25	HW3M405K					
5.0	1.17	1.39	2.25	HW3G505K	1.54	1.78	2.25	HW3J505K	1.90	2.14	3.25	HW3M505K					
6.0	1.28	1.52	2.25	HW3G605K	1.68	1.92	2.25	HW3J605K	2.08	2.33	3.25	HW3M605K					
8.0	1.47	1.71	2.25	HW3G805K	1.57	1.81	3.25	HW3J805K	2.40	2.65	3.25	HW3M805K					
10.0	1.63	1.87	2.25	HW3G106K	1.75	1.99	3.25	HW3J106K	2.68	2.93	3.25	HW3M106K					
12.0	1.78	2.03	2.25	HW3G126K	1.91	2.15	3.25	HW3J126K	2.95	3.19	3.25	HW3M126K					
15.0	1.99	2.24	2.25	HW3G156K	2.13	2.37	3.25	HW3J156K	3.30	3.54	3.25	HW3M156K					

**TOLERANCE TABLE**

Code	Tolerance
A	± 0.1% ♦
B	± 0.25% ♦
D	± 0.5% ♦
F	± 1% ♦
G	± 2% ♦
H	± 3% ♦
J	± 5%
K	± 10%
M	± 20%
N	± 30%
P	GMV
S	-10% +30%
T	-10% +50%
V	-10% +20%
X	Special
♦	Temperature Stabilized

Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches. All +.05" dimension tolerances are Maximum.

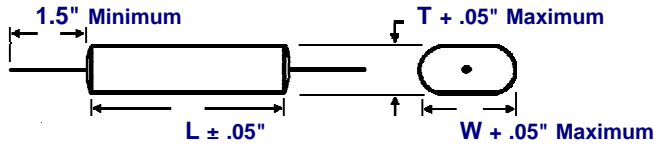
# METALLIZED POLYCARBONATE WRAP AND FILL, OVAL AXIAL LEAD CAPACITORS



**HW2**  
METALLIZED POLYCARBONATE  
WRAP & FILL, OVAL  
MINIATURE SERIES

**DIMENSIONS** See tables for specific T, W, L values.

**WIRE SIZE** (Length 1.5" Minimum)



BODY LENGTH (L)	WIRE SIZE	
	AWG No.	Diameter
≤ 0.65"	24	0.020"
> 0.65" ≤ 1.00"	22	0.025"
> 1.00"	20	0.032"

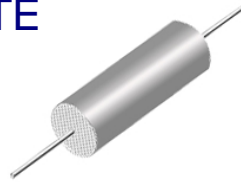
**SELECTION AND ORDERING TABLES** Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	50VDC 40VAC				100VDC 70VAC				200VDC 120VAC				400VDC 230VAC											
	T		W		L		PART #		T		W		L		PART #		T		W		L		PART #	
	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"	+ .05"
.001	.09	.18	.40	HW2C102K	.09	.18	.40	HW2D102K	.09	.18	.40	HW2E102K	.09	.18	.40	HW2G102K								
.0018	.09	.18	.40	HW2C182K	.09	.18	.40	HW2D182K	.09	.18	.40	HW2E182K	.09	.18	.40	HW2G182K								
.0022	.09	.18	.40	HW2C222K	.09	.18	.40	HW2D222K	.09	.18	.40	HW2E222K	.09	.18	.40	HW2G222K								
.0027	.09	.18	.40	HW2C272K	.09	.18	.40	HW2D272K	.09	.18	.40	HW2E272K	.09	.18	.40	HW2G272K								
.0033	.09	.18	.40	HW2C332K	.09	.18	.40	HW2D332K	.09	.18	.40	HW2E332K	.09	.18	.40	HW2G332K								
.0039	.09	.18	.40	HW2C392K	.09	.18	.40	HW2D392K	.09	.18	.40	HW2E392K	.10	.19	.40	HW2G392K								
.0047	.09	.18	.40	HW2C472K	.09	.18	.40	HW2D472K	.09	.18	.40	HW2E472K	.11	.21	.40	HW2G472K								
.0056	.09	.18	.40	HW2C562K	.09	.18	.40	HW2D562K	.09	.18	.40	HW2E562K	.09	.18	.53	HW2G562K								
.0068	.09	.18	.40	HW2C682K	.09	.18	.40	HW2D682K	.09	.18	.40	HW2E682K	.09	.18	.53	HW2G682K								
.0082	.09	.18	.40	HW2C822K	.09	.18	.40	HW2D822K	.09	.18	.40	HW2E822K	.09	.18	.53	HW2G822K								
.01	.09	.18	.40	HW2C103K	.09	.18	.40	HW2D103K	.09	.18	.40	HW2E103K	.11	.20	.53	HW2G103K								
.012	.09	.18	.40	HW2C123K	.09	.18	.40	HW2D123K	.09	.18	.40	HW2E123K	.12	.22	.53	HW2G123K								
.015	.09	.18	.40	HW2C153K	.09	.18	.40	HW2D153K	.09	.18	.40	HW2E153K	.14	.24	.53	HW2G153K								
.018	.09	.18	.40	HW2C183K	.09	.18	.40	HW2D183K	.10	.19	.40	HW2E183K	.16	.25	.53	HW2G183K								
.022	.09	.18	.40	HW2C223K	.09	.18	.40	HW2D223K	.11	.20	.40	HW2E223K	.18	.28	.53	HW2G223K								
.027	.09	.18	.40	HW2C273K	.09	.18	.40	HW2D273K	.09	.18	.53	HW2E273K	.21	.30	.53	HW2G273K								
.033	.09	.18	.40	HW2C333K	.09	.18	.40	HW2D333K	.09	.18	.53	HW2E333K	.23	.33	.53	HW2G333K								
.039	.09	.18	.40	HW2C393K	.09	.18	.40	HW2D393K	.10	.20	.53	HW2E393K	.19	.29	.65	HW2G393K								
.047	.09	.18	.40	HW2C473K	.09	.18	.40	HW2D473K	.11	.21	.53	HW2E473K	.21	.31	.65	HW2G473K								
.056	.09	.18	.40	HW2C563K	.10	.19	.40	HW2D563K	.13	.22	.53	HW2E563K	.24	.33	.65	HW2G563K								
.068	.09	.18	.40	HW2C683K	.11	.21	.40	HW2D683K	.15	.24	.53	HW2E683K	.22	.31	.78	HW2G683K								
.082	.09	.18	.40	HW2C823K	.09	.18	.53	HW2D823K	.16	.26	.53	HW2E823K	.25	.34	.78	HW2G823K								
.10	.09	.18	.40	HW2C104K	.10	.19	.53	HW2D104K	.18	.28	.53	HW2E104K	.28	.37	.78	HW2G104K								
.12	.09	.18	.40	HW2C124K	.11	.20	.53	HW2D124K	.21	.30	.53	HW2E124K	.31	.40	.78	HW2G124K								
.15	.10	.20	.40	HW2C154K	.12	.22	.53	HW2D154K	.23	.33	.53	HW2E154K	.27	.36	.95	HW2G154K								
.18	.09	.18	.53	HW2C184K	.14	.23	.53	HW2D184K	.21	.30	.65	HW2E184K	.34	.43	.95	HW2G184K								
.22	.09	.18	.53	HW2C224K	.16	.25	.53	HW2D224K	.23	.33	.65	HW2E224K	.28	.44	1.17	HW2G224K								
.27	.10	.19	.53	HW2C274K	.18	.28	.53	HW2D274K	.24	.33	.78	HW2E274K	.31	.48	1.17	HW2G274K								
.33	.11	.21	.53	HW2C334K	.20	.30	.53	HW2D334K	.27	.36	.78	HW2E334K	.35	.52	1.17	HW2G334K								
.39	.13	.22	.53	HW2C394K	.23	.32	.53	HW2D394K	.30	.40	.78	HW2E394K	.39	.56	1.17	HW2G394K								
.47	.14	.24	.53	HW2C474K	.20	.30	.65	HW2D474K	.33	.43	.78	HW2E474K	.44	.60	1.17	HW2G474K								
.56	.16	.25	.53	HW2C564K	.23	.32	.65	HW2D564K	.32	.41	.95	HW2E564K	.49	.65	1.17	HW2G564K								
.68	.18	.27	.53	W2C684K	.23	.32	.78	HW2D684K	.25	.42	1.17	HW2E684K	.47	.63	1.45	HW2G684K								
.82	.20	.29	.53	HW2C824K	.25	.35	.78	HW2D824K	.28	.45	1.17	HW2E824K	.46	.63	1.68	HW2G824K								
1.0	.24	.32	.53	HW2C105K	.28	.38	.78	HW2D105K	.32	.49	1.17	HW2E105K	.47	.64	1.90	HW2G105K								
1.2	.20	.29	.65	HW2C125K	.31	.41	.78	HW2D125K	.36	.52	1.17	HW2E125K	.52	.69	1.90	HW2G125K								
1.5	.22	.32	.65	HW2C155K	.31	.40	.95	HW2D155K	.41	.58	1.17	HW2E155K	.59	.76	1.90	HW2G155K								
1.8	.23	.32	.78	HW2C185K	.34	.43	.95	HW2D185K	.46	.62	1.17	HW2E185K	.66	.82	1.90	HW2G185K								
2.0	.24	.34	.78	HW2C205K	.27	.44	1.17	HW2D205K	.49	.65	1.17	HW2E205K	.70	.87	1.90	HW2G205K								
2.5	.28	.37	.78	HW2C255K	.31	.48	1.17	HW2D255K	.47	.64	1.45	HW2E255K												
3.0	.31	.41	.78	HW2C305K	.35	.51	1.17	HW2D305K	.47	.63	1.68	HW2E305K												
3.5	.34	.43	.78	HW2C355K	.38	.55	1.17	HW2D355K	.51	.67	1.68	HW2E355K												
4.0	.31	.40	.95	HW2C405K	.41	.58	1.17	HW2D405K	.50	.66	1.90	HW2E405K												
4.5	.33	.42	.95	HW2C455K	.44	.61	1.17	HW2D455K	.53	.70	1.90	HW2E455K												
5.0	.25	.42	1.17	HW2C505K	.47	.63	1.17	HW2D505K	.57	.73	1.90	HW2E505K												
6.0	.28	.45	1.17	HW2C605K	.52	.68	1.17	HW2D605K	.63	.79	1.90	HW2E605K												
8.0	.34	.50	1.17	HW2C805K	.53	.69	1.45	HW2D805K	.74	.90	1.90	HW2E805K												
10.0	.39	.56	1.17	HW2C106K	.54	.70	1.68	HW2D106K	.84	1.00	1.90	HW2E106K												
12.0	.43	.60	1.17	HW2C126K	.54	.70	1.90	HW2D126K																
15.0	.49	.66	1.17	HW2C156K	.61	.78	1.90	HW2D156K																
18.0	.47	.64	1.45	HW2C186K	.68	.84	1.90	HW2D186K																
20.0	.50	.67	1.45	HW2C206K	.72	.88	1.90	HW2D206K																
30.0	.56	.73	1.68	HW2C306K																				
40.0	.66	.83	1.68	HW2C406K																				
50.0	.75	.91	1.68	HW2C506K																				

Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches. All +.05" dimension tolerances are Maximum.

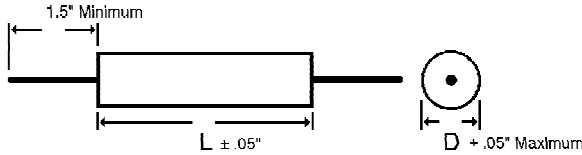


# METALLIZED POLYCARBONATE WRAP AND FILL, ROUND AXIAL LEAD CAPACITORS



**HR2**  
METALLIZED POLYCARBONATE  
WRAP & FILL, ROUND  
MINIATURE SERIES

**DIMENSIONS** See tables for specific D, L values.



**WIRE SIZE** (Length 1.5" Minimum)

BODY LENGTH (L)	WIRE SIZE	
	AWG No.	Diameter
≤ 0.65"	24	0.020"
> 0.65" ≤ 1.00"	22	0.025"
> 1.00"	20	0.032"

**SELECTION AND ORDERING TABLES** Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	50VDC 40VAC			100VDC 70VAC			200VDC 120VAC			400VDC 230VAC			
	RATING	D	L	PART #	D	L	PART #	D	L	PART #	D	L	PART #
	+ .05"	± .05"		+ .05"	± .05"		+ .05"	± .05"		+ .05"	± .05"		
.001	.15	.40	HR2C102K	.15	.40	HR2D102K	.15	.40	HR2E102K	.15	.40	HR2G102K	
.0018	.15	.40	HR2C182K	.15	.40	HR2D182K	.15	.40	HR2E182K	.15	.40	HR2G182K	
.0022	.15	.40	HR2C222K	.15	.40	HR2D222K	.15	.40	HR2E222K	.15	.40	HR2G222K	
.0027	.15	.40	HR2C272K	.15	.40	HR2D272K	.15	.40	HR2E272K	.15	.40	HR2G272K	
.0033	.15	.40	HR2C332K	.15	.40	HR2D332K	.15	.40	HR2E332K	.15	.40	HR2G332K	
.0039	.15	.40	HR2C392K	.15	.40	HR2D392K	.15	.40	HR2E392K	.16	.40	HR2G392K	
.0047	.15	.40	HR2C472K	.15	.40	HR2D472K	.15	.40	HR2E472K	.17	.40	HR2G472K	
.0056	.15	.40	HR2C562K	.15	.40	HR2D562K	.15	.40	HR2E562K	.15	.53	HR2G562K	
.0068	.15	.40	HR2C682K	.15	.40	HR2D682K	.15	.40	HR2E682K	.15	.53	HR2G682K	
.0082	.15	.40	HR2C822K	.15	.40	HR2D822K	.15	.40	HR2E822K	.15	.53	HR2G822K	
.01	.15	.40	HR2C103K	.15	.40	HR2D103K	.15	.40	HR2E103K	.17	.53	HR2G103K	
.012	.15	.40	HR2C123K	.15	.40	HR2D123K	.15	.40	HR2E123K	.18	.53	HR2G123K	
.015	.15	.40	HR2C153K	.15	.40	HR2D153K	.15	.40	HR2E153K	.20	.53	HR2G153K	
.018	.15	.40	HR2C183K	.15	.40	HR2D183K	.16	.40	HR2E183K	.22	.53	HR2G183K	
.022	.15	.40	HR2C223K	.15	.40	HR2D223K	.17	.40	HR2E223K	.24	.53	HR2G223K	
.027	.15	.40	HR2C273K	.15	.40	HR2D273K	.15	.53	HR2E273K	.27	.53	HR2G273K	
.033	.15	.40	HR2C333K	.15	.40	HR2D333K	.15	.53	HR2E333K	.29	.53	HR2G333K	
.039	.15	.40	HR2C393K	.15	.40	HR2D393K	.16	.53	HR2E393K	.25	.65	HR2G393K	
.047	.15	.40	HR2C473K	.15	.40	HR2D473K	.17	.53	HR2E473K	.27	.65	HR2G473K	
.056	.15	.40	HR2C563K	.16	.40	HR2D563K	.19	.53	HR2E563K	.30	.65	HR2G563K	
.068	.15	.40	HR2C683K	.18	.40	HR2D683K	.21	.53	HR2E683K	.28	.78	HR2G683K	
.082	.15	.40	HR2C823K	.15	.53	HR2D823K	.22	.53	HR2E823K	.31	.78	HR2G823K	
.10	.15	.40	HR2C104K	.16	.53	HR2D104K	.24	.53	HR2E104K	.34	.78	HR2G104K	
.12	.15	.40	HR2C124K	.17	.53	HR2D124K	.27	.53	HR2E124K	.37	.78	HR2G124K	
.15	.16	.40	HR2C154K	.19	.53	HR2D154K	.29	.53	HR2E154K	.35	.95	HR2G154K	
.18	.15	.53	HR2C184K	.20	.53	HR2D184K	.27	.65	HR2E184K	.40	.95	HR2G184K	
.22	.15	.53	HR2C224K	.22	.53	HR2D224K	.29	.65	HR2E224K	.38	1.17	HR2G224K	
.27	.16	.53	HR2C274K	.24	.53	HR2D274K	.30	.78	HR2E274K	.42	1.17	HR2G274K	
.33	.18	.53	HR2C334K	.26	.53	HR2D334K	.33	.78	HR2E334K	.46	1.17	HR2G334K	
.39	.19	.53	HR2C394K	.29	.53	HR2D394K	.36	.78	HR2E394K	.50	1.17	HR2G394K	
.47	.20	.53	HR2C474K	.26	.65	HR2D474K	.39	.78	HR2E474K	.54	1.17	HR2G474K	
.56	.22	.53	HR2C564K	.29	.65	HR2D564K	.38	.95	HR2E564K	.59	1.17	HR2G564K	
.68	.24	.53	HR2C684K	.29	.78	HR2D684K	.36	1.17	HR2E684K	.57	1.45	HR2G684K	
.82	.26	.53	HR2C824K	.31	.78	HR2D824K	.39	1.17	HR2E824K	.57	1.68	HR2G824K	
1.0	.30	.53	HR2C105K	.34	.78	HR2D105K	.43	1.17	HR2E105K	.57	1.90	HR2G105K	
1.2	.26	.65	HR2C125K	.37	.78	HR2D125K	.46	1.17	HR2E125K	.63	1.90	HR2G125K	
1.5	.28	.65	HR2C155K	.37	.95	HR2D155K	.52	1.17	HR2E155K				
1.8	.29	.78	HR2C185K	.40	.95	HR2D185K	.56	1.17	HR2E185K				
2.0	.30	.78	HR2C205K	.38	1.17	HR2D205K	.59	1.17	HR2E205K				
2.5	.34	.78	HR2C255K	.42	1.17	HR2D255K	.58	1.45	HR2E255K				
3.0	.37	.78	HR2C305K	.45	1.17	HR2D305K	.57	1.68	HR2E305K				
3.5	.40	.78	HR2C355K	.48	1.17	HR2D355K	.61	1.68	HR2E355K				
4.0	.37	.95	HR2C405K	.52	1.17	HR2D405K	.60	1.90	HR2E405K				
4.5	.39	.95	HR2C455K	.55	1.17	HR2D455K	.64	1.90	HR2E455K				
5.0	.36	1.17	HR2C505K	.58	1.17	HR2D505K	.67	1.90	HR2E505K				
6.0	.39	1.17	HR2C605K	.62	1.17	HR2D605K	.73	1.90	HR2E605K				
8.0	.45	1.17	HR2C805K	.63	1.45	HR2D805K	.85	1.90	HR2E805K				
10.0	.50	1.17	HR2C106K	.64	1.68	HR2D106K	.94	1.90	HR2E106K				
12.0	.54	1.17	HR2C126K	.65	1.90	HR2D126K							
15.0	.60	1.17	HR2C156K	.72	1.90	HR2D156K							
18.0	.58	1.45	HR2C186K	.78	1.90	HR2D186K							
20.0	.61	1.45	HR2C206K	.82	1.90	HR2D206K							
30.0	.67	1.68	HR2C306K										
40.0	.77	1.68	HR2C406K										
50.0	.85	1.68	HR2C506K										

**TOLERANCE TABLE**

Code	Tolerance
A	± 0.1% ♦
B	± 0.25% ♦
D	± 0.5% ♦
F	± 1% ♦
G	± 2% ♦
H	± 3% ♦
J	± 5%
K	± 10%
M	± 20%
N	± 30%
P	GMV
S	-10% +30%
T	-10% +50%
V	-10% +20%
X	Special

♦ Temperature Stabilized

Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches. All +.05" dimension tolerances are Maximum.

# METALLIZED POLYCARBONATE WRAP AND FILL, ROUND AXIAL LEAD CAPACITORS



**HR3**  
METALLIZED POLYCARBONATE  
WRAP & FILL, ROUND  
REGULAR SERIES

## ORDERING DESCRIPTION

Capacitor, fixed: Metallized Polycarbonate dielectric; extended foil construction; tin-plated copper-clad steel wire axial leads; encased in skin-tight plastic wrap with epoxy end fill.

## APPLICATION NOTES

Wrap & Fill capacitors are not intended for exposure to high humidity conditions over extended periods of time. For stringent environmental conditions, Wrap & Fill capacitors should be used in encapsulated or hermetically sealed circuitry.

## SELECTION AND ORDERING TABLES Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	35VDC 20VAC			50VDC 40VAC			100VDC 70VAC			200VDC 120VAC		
	RATING	D + .05"	L ± .05"	PART #	D + .05"	L ± .05"	PART #	D + .05"	L ± .05"	PART #	D + .05"	L ± .05"
.001	.15	.40	HR3S102K	.15	.40	HR3C102K	.15	.40	HR3D102K	.15	.40	HR3E102K
.0027	.15	.40	HR3S272K	.15	.40	HR3C272K	.15	.40	HR3D272K	.15	.40	HR3E272K
.0033	.15	.40	HR3S332K	.15	.40	HR3C332K	.15	.40	HR3D332K	.15	.40	HR3E332K
.0056	.15	.40	HR3S562K	.15	.40	HR3C562K	.15	.40	HR3D562K	.15	.40	HR3E562K
.0068	.15	.40	HR3S682K	.15	.40	HR3C682K	.15	.40	HR3D682K	.15	.40	HR3E682K
.0082	.15	.40	HR3S822K	.15	.40	HR3C822K	.15	.40	HR3D822K	.15	.40	HR3E822K
.01	.15	.40	HR3S103K	.15	.40	HR3C103K	.15	.40	HR3D103K	.17	.40	HR3E103K
.012	.15	.40	HR3S123K	.15	.40	HR3C123K	.15	.40	HR3D123K	.17	.40	HR3E123K
.015	.15	.40	HR3S153K	.15	.40	HR3C153K	.15	.40	HR3D153K	.18	.40	HR3E153K
.018	.15	.40	HR3S183K	.15	.40	HR3C183K	.15	.40	HR3D183K	.19	.40	HR3E183K
.022	.15	.40	HR3S223K	.15	.40	HR3C223K	.15	.40	HR3D223K	.20	.40	HR3E223K
.027	.15	.40	HR3S273K	.15	.40	HR3C273K	.15	.40	HR3D273K	.17	.53	HR3E273K
.033	.15	.40	HR3S333K	.15	.40	HR3C333K	.17	.40	HR3D333K	.18	.53	HR3E333K
.039	.15	.40	HR3S393K	.15	.40	HR3C393K	.18	.40	HR3D393K	.19	.53	HR3E393K
.047	.15	.40	HR3S473K	.15	.40	HR3C473K	.16	.53	HR3D473K	.21	.53	HR3E473K
.056	.15	.40	HR3S563K	.15	.40	HR3C563K	.17	.53	HR3D563K	.23	.53	HR3E563K
.068	.15	.40	HR3S683K	.16	.40	HR3C683K	.17	.53	HR3D683K	.25	.53	HR3E683K
.082	.15	.40	HR3S823K	.17	.40	HR3C823K	.17	.53	HR3D823K	.27	.53	HR3E823K
.10	.15	.40	HR3S104K	.18	.40	HR3C104K	.18	.53	HR3D104K	.28	.53	HR3E104K
.12	.16	.40	HR3S124K	.19	.40	HR3C124K	.20	.53	HR3D124K	.30	.53	HR3E124K
.15	.16	.40	HR3S154K	.16	.53	HR3C154K	.22	.53	HR3D154K	.29	.65	HR3E154K
.18	.16	.40	HR3S184K	.17	.53	HR3C184K	.23	.53	HR3D184K	.30	.65	HR3E184K
.22	.17	.40	HR3S224K	.18	.53	HR3C224K	.25	.53	HR3D224K	.33	.65	HR3E224K
.25	.18	.40	HR3S254K	.19	.53	HR3C254K	.21	.65	HR3D254K	.31	.78	HR3E254K
.27	.19	.40	HR3S274K	.20	.53	HR3C274K	.23	.65	HR3D274K	.32	.78	HR3E274K
.33	.21	.40	HR3S334K	.21	.53	HR3C334K	.25	.65	HR3D334K	.35	.78	HR3E334K
.39	.22	.40	HR3S394K	.23	.53	HR3C394K	.27	.65	HR3D394K	.37	.78	HR3E394K
.47	.24	.40	HR3S474K	.25	.53	HR3C474K	.27	.78	HR3D474K	.41	.78	HR3E474K
.50	.18	.53	HR3S504K	.26	.53	HR3C504K	.28	.78	HR3D504K	.42	.78	HR3E504K
.56	.18	.53	HR3S564K	.27	.53	HR3C564K	.29	.78	HR3D564K	.40	.97	HR3E564K
.68	.19	.53	HR3S684K	.30	.53	HR3C684K	.30	.78	HR3D684K	.42	.97	HR3E684K
.75	.20	.53	HR3S754K	.31	.53	HR3C754K	.32	.78	HR3D754K	.44	.97	HR3E754K
.82	.21	.53	HR3S824K	.26	.65	HR3C824K	.33	.78	HR3D824K	.41	1.17	HR3E824K
1.0	.23	.53	HR3S105K	.29	.65	HR3C105K	.31	.97	HR3D105K	.44	1.17	HR3E105K
1.2	.25	.53	HR3S125K	.27	.78	HR3C125K	.32	1.17	HR3D125K	.41	1.68	HR3E125K
1.5	.28	.53	HR3S155K	.30	.78	HR3C155K	.33	1.17	HR3D155K	.44	1.68	HR3E155K
1.8	.30	.53	HR3S185K	.33	.78	HR3C185K	.34	1.17	HR3D185K	.48	1.68	HR3E185K
2.0	.31	.53	HR3S205K	.35	.78	HR3C205K	.38	1.17	HR3D205K	.50	1.68	HR3E205K
3.0	.30	.65	HR3S305K	.37	.97	HR3C305K	.46	1.17	HR3D305K	.61	1.68	HR3E305K
4.0	.30	.78	HR3S405K	.37	1.17	HR3C405K	.44	1.68	HR3D405K	.69	1.68	HR3E405K
5.0	.34	.78	HR3S505K	.40	1.17	HR3C505K	.48	1.68	HR3D505K	.76	1.68	HR3E505K
6.0	.37	.78	HR3S605K	.45	1.17	HR3C605K	.52	1.68	HR3D605K	.85	1.68	HR3E605K
8.0	.38	.97	HR3S805K	.50	1.17	HR3C805K	.59	1.68	HR3D805K	.96	1.68	HR3E805K
10.0	.43	.97	HR3S106K	.56	1.17	HR3C106K	.65	1.68	HR3D106K	1.07	1.68	HR3E106K
12.0	.38	1.17	HR3S126K	.62	1.17	HR3C126K	.70	1.68	HR3D126K	1.00	2.25	HR3E126K
15.0	.43	1.17	HR3S156K	.54	1.68	HR3C156K	.79	1.68	HR3D156K	1.11	2.25	HR3E156K
20.0	.49	1.17	HR3S206K	.62	1.68	HR3C206K	.89	1.68	HR3D206K	1.28	2.25	HR3E206K
30.0	.60	1.17	HR3S306K	.72	1.68	HR3C306K	1.09	1.68	HR3D306K	1.53	2.25	HR3E306K
40.0	.68	1.17	HR3S406K	.80	1.68	HR3C406K	1.08	2.25	HR3D406K	1.44	3.25	HR3E406K
50.0	.76	1.17	HR3S506K	.90	1.68	HR3C506K	1.19	2.25	HR3D506K	1.58	3.25	HR3E506K
75.0	.88	1.45	HR3S756K	1.09	1.68	HR3C756K	1.44	2.25	HR3D756K	1.90	3.25	HR3E756K
100.0	.99	1.45	HR3S107K	1.21	1.68	HR3C107K	1.65	2.25	HR3D107K	2.17	3.25	HR3E107K

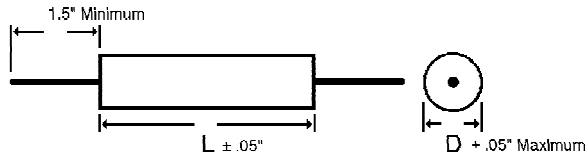
Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches. All +.05" dimension tolerances are Maximum.

# METALLIZED POLYCARBONATE WRAP AND FILL, ROUND AXIAL LEAD CAPACITORS



**HR3**  
METALLIZED POLYCARBONATE  
WRAP & FILL, ROUND  
REGULAR SERIES

**DIMENSIONS** See tables for specific D, L values.



**WIRE SIZE** (Length 1.5" Minimum)

BODY LENGTH (L)	WIRE SIZE	
	AWG No.	Diameter
≤ 0.65"	24	0.020"
> 0.65" ≤ 1.00"	22	0.025"
> 1.00"	20	0.032"

**SELECTION AND ORDERING TABLES** Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	400VDC 230VAC			600VDC 275VAC			1000VDC 480VAC			1500VDC 750VAC		
	RATING	D	L	PART #	D	L	PART #	D	L	PART #	D	L
	+ .05"	± .05"		+ .05"	± .05"		+ .05"	± .05"		+ .05"	± .05"	
.001	.15	.40	HR3G102K	.15	.40	HR3J102K	.18	.97	HR3M102K	.18	.97	HR3P102K
.0012	.15	.40	HR3G122K	.15	.40	HR3J122K	.18	.97	HR3M122K	.18	.97	HR3P122K
.0015	.15	.40	HR3G152K	.15	.40	HR3J152K	.20	.97	HR3M152K	.20	.97	HR3P152K
.0018	.15	.40	HR3G182K	.15	.40	HR3J182K	.21	.97	HR3M182K	.21	.97	HR3P182K
.0022	.15	.40	HR3G222K	.15	.40	HR3J222K	.22	.97	HR3M222K	.22	.97	HR3P222K
.0027	.15	.40	HR3G272K	.15	.40	HR3J272K	.22	.97	HR3M272K	.24	.97	HR3P272K
.0033	.16	.40	HR3G332K	.16	.40	HR3J332K	.22	.97	HR3M332K	.27	.97	HR3P332K
.0039	.16	.40	HR3G392K	.16	.53	HR3J392K	.22	.97	HR3M392K	.29	.97	HR3P392K
.0047	.16	.40	HR3G472K	.16	.53	HR3J472K	.23	.97	HR3M472K	.31	.97	HR3P472K
.0056	.16	.53	HR3G562K	.16	.53	HR3J562K	.24	.97	HR3M562K	.33	.97	HR3P562K
.0068	.17	.53	HR3G682K	.17	.53	HR3J682K	.25	.97	HR3M682K	.37	.97	HR3P682K
.0082	.19	.53	HR3G822K	.19	.53	HR3J822K	.27	.97	HR3M822K	.40	.97	HR3P822K
.01	.20	.53	HR3G103K	.23	.53	HR3J103K	.28	.97	HR3M103K	.44	.97	HR3P103K
.012	.22	.53	HR3G123K	.27	.53	HR3J123K	.30	.97	HR3M123K	.49	.97	HR3P123K
.015	.23	.53	HR3G153K	.29	.53	HR3J153K	.33	.97	HR3M153K	.54	.97	HR3P153K
.018	.25	.53	HR3G183K	.30	.53	HR3J183K	.38	.97	HR3M183K	.61	.97	HR3P183K
.022	.28	.53	HR3G223K	.29	.65	HR3J223K	.41	.97	HR3M223K	.47	1.31	HR3P223K
.027	.29	.53	HR3G273K	.30	.65	HR3J273K	.44	.97	HR3M273K	.52	1.31	HR3P273K
.033	.27	.65	HR3G333K	.31	.78	HR3J333K	.49	.97	HR3M333K	.57	1.31	HR3P333K
.039	.29	.65	HR3G393K	.32	.78	HR3J393K	.53	.97	HR3M393K	.62	1.31	HR3P393K
.047	.30	.65	HR3G473K	.34	.78	HR3J473K	.59	.97	HR3M473K	.56	1.68	HR3P473K
.056	.31	.78	HR3G563K	.37	.78	HR3J563K	.47	1.31	HR3M563K	.61	1.68	HR3P563K
.068	.32	.78	HR3G683K	.41	.78	HR3J683K	.51	1.31	HR3M683K	.66	1.68	HR3P683K
.082	.35	.78	HR3G823K	.44	.78	HR3J823K	.55	1.31	HR3M823K	.73	1.68	HR3P823K
.10	.38	.78	HR3G104K	.44	.97	HR3J104K	.60	1.31	HR3M104K	.78	1.68	HR3P104K
.12	.41	.78	HR3G124K	.40	1.17	HR3J124K	.65	1.31	HR3M124K	.85	1.68	HR3P124K
.15	.40	.97	HR3G154K	.44	1.17	HR3J154K	.73	1.31	HR3M154K	.95	1.68	HR3P154K
.18	.43	.97	HR3G184K	.48	1.17	HR3J184K	.79	1.31	HR3M184K	1.05	1.68	HR3P184K
.22	.42	1.17	HR3G224K	.53	1.17	HR3J224K	.72	1.68	HR3M224K	1.16	1.68	HR3P224K
.25	.44	1.17	HR3G254K	.47	1.68	HR3J254K	.76	1.68	HR3M254K	1.25	1.68	HR3P254K
.27	.46	1.17	HR3G274K	.48	1.68	HR3J274K	.79	1.68	HR3M274K	1.28	1.68	HR3P274K
.33	.50	1.17	HR3G334K	.52	1.68	HR3J334K	.87	1.68	HR3M334K	1.08	2.50	HR3P334K
.39	.54	1.17	HR3G394K	.57	1.68	HR3J394K	.94	1.68	HR3M394K	1.17	2.50	HR3P394K
.47	.59	1.17	HR3G474K	.62	1.68	HR3J474K	1.04	1.68	HR3M474K	1.28	2.50	HR3P474K
.50	.50	1.68	HR3G504K	.63	1.68	HR3J504K	1.07	1.68	HR3M504K			
.56	.52	1.68	HR3G564K	.67	1.68	HR3J564K	1.12	1.68	HR3M564K			
.68	.58	1.68	HR3G684K	.69	2.00	HR3J684K	1.23	1.68	HR3M684K			
.75	.60	1.68	HR3G754K	.72	2.00	HR3J754K	1.30	1.68	HR3M754K			
.82	.62	1.68	HR3G824K	.71	2.25	HR3J824K	1.35	1.68	HR3M824K			
1.0	.68	1.68	HR3G105K	.77	2.25	HR3J105K	1.16	2.50	HR3M105K			
1.2	.75	1.68	HR3G125K	.84	2.25	HR3J125K	1.26	2.50	HR3M125K			
1.5	.84	1.68	HR3G155K	.94	2.25	HR3J155K	1.39	2.50	HR3M155K			
1.8	.91	1.68	HR3G185K	1.05	2.25	HR3J185K	1.51	2.50	HR3M185K			
2.0	.96	1.68	HR3G205K	1.08	2.25	HR3J205K	1.58	2.50	HR3M205K			
3.0	1.16	1.68	HR3G305K	1.31	2.25	HR3J305K	1.65	3.25	HR3M305K			
4.0	1.15	2.25	HR3G405K	1.51	2.25	HR3J405K	1.87	3.25	HR3M405K			
5.0	1.28	2.25	HR3G505K	1.65	2.25	HR3J505K	2.10	3.25	HR3M505K			
6.0	1.40	2.25	HR3G605K	1.80	2.25	HR3J605K	2.28	3.25	HR3M605K			
8.0	1.57	2.25	HR3G805K	1.69	3.25	HR3J805K	2.61	3.25	HR3M805K			
10.0	1.74	2.25	HR3G106K	1.87	3.25	HR3J106K	2.89	3.25	HR3M106K			
12.0	1.89	2.25	HR3G126K	2.03	3.25	HR3J126K	3.15	3.25	HR3M126K			
15.0	2.11	2.25	HR3G156K	2.25	3.25	HR3J156K	3.50	3.25	HR3M156K			

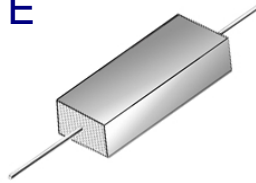
**TOLERANCE TABLE**

Code	Tolerance
A	= ± 0.1% ♦
B	= ± 0.25% ♦
D	= ± 0.5% ♦
F	= ± 1% ♦
G	= ± 2% ♦
H	= ± 3% ♦
J	= ± 5%
K	= ± 10%
M	= ± 20%
N	= ± 30%
P	= GMV
S	= -10% +30%
T	= -10% +50%
V	= -10% +20%
X	= Special

♦ Temperature Stabilized

Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches. All +.05" dimension tolerances are Maximum.

# METALLIZED POLYCARBONATE EPOXY CASE, AXIAL LEAD, RECTANGULAR CAPACITORS



**HE3**  
METALLIZED POLYCARBONATE  
EPOXY CASE, AXIAL, RECT.  
REGULAR SERIES

## ORDERING DESCRIPTION

Capacitor, fixed: Metallized Polycarbonate dielectric; extended foil construction; tin-plated copper-clad steel wire axial leads; encased in a molded epoxy/plastic shell with epoxy fill.

## APPLICATION NOTES

Epoxy Case capacitors are not intended for exposure to high humidity conditions over extended periods of time. For stringent environmental conditions, Epoxy Case capacitors should be used in encapsulated or hermetically sealed circuitry.

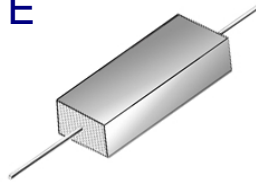
## SELECTION AND ORDERING TABLES Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	35VDC 20VAC				50VDC 40VAC				100VDC 70VAC				200VDC 120VAC											
	T		W		L		PART #		T		W		L		PART #		T		W		L		PART #	
	± .01"	± .01"	± .03"		± .01"	± .01"	± .03"		± .01"	± .01"	± .03"		± .01"	± .01"	± .03"		± .01"	± .01"	± .03"		± .01"	± .01"	± .03"	
.001	.17	.29	.42	HE3S102K	.17	.29	.42	HE3C102K	.17	.29	.42	HE3D102K	.17	.29	.42	HE3E102K								
.0027	.17	.29	.42	HE3S272K	.17	.29	.42	HE3C272K	.17	.29	.42	HE3D272K	.17	.29	.42	HE3E272K								
.0033	.17	.29	.42	HE3S332K	.17	.29	.42	HE3C332K	.17	.29	.42	HE3D332K	.17	.29	.42	HE3E332K								
.0056	.17	.29	.42	HE3S562K	.17	.29	.42	HE3C562K	.17	.29	.42	HE3D562K	.17	.29	.42	HE3E562K								
.0068	.17	.29	.42	HE3S682K	.17	.29	.42	HE3C682K	.17	.29	.42	HE3D682K	.17	.29	.42	HE3E682K								
.0082	.17	.29	.42	HE3S822K	.17	.29	.42	HE3C822K	.17	.29	.42	HE3D822K	.17	.29	.42	HE3E822K								
.01	.17	.29	.42	HE3S103K	.17	.29	.42	HE3C103K	.17	.29	.42	HE3D103K	.17	.29	.42	HE3E103K								
.012	.17	.29	.42	HE3S123K	.17	.29	.42	HE3C123K	.17	.29	.42	HE3D123K	.17	.29	.42	HE3E123K								
.015	.17	.29	.42	HE3S153K	.17	.29	.42	HE3C153K	.17	.29	.42	HE3D153K	.17	.29	.42	HE3E153K								
.018	.17	.29	.42	HE3S183K	.17	.29	.42	HE3C183K	.17	.29	.42	HE3D183K	.17	.29	.42	HE3E183K								
.022	.17	.29	.42	HE3S223K	.17	.29	.42	HE3C223K	.17	.29	.42	HE3D223K	.17	.29	.57	HE3E223K								
.027	.17	.29	.42	HE3S273K	.17	.29	.42	HE3C273K	.17	.29	.42	HE3D273K	.17	.29	.57	HE3E273K								
.033	.17	.29	.42	HE3S333K	.17	.29	.42	HE3C333K	.17	.29	.42	HE3D333K	.17	.29	.57	HE3E333K								
.039	.17	.29	.42	HE3S393K	.17	.29	.42	HE3C393K	.17	.29	.42	HE3D393K	.17	.29	.57	HE3E393K								
.047	.17	.29	.42	HE3S473K	.17	.29	.42	HE3C473K	.17	.29	.57	HE3D473K	.23	.36	.55	HE3E473K								
.056	.17	.29	.42	HE3S563K	.17	.29	.42	HE3C563K	.17	.29	.57	HE3D563K	.23	.36	.55	HE3E563K								
.068	.17	.29	.42	HE3S683K	.17	.29	.42	HE3C683K	.17	.29	.57	HE3D683K	.23	.36	.55	HE3E683K								
.082	.17	.29	.42	HE3S823K	.17	.29	.42	HE3C823K	.23	.36	.55	HE3D823K	.29	.42	.57	HE3E823K								
.10	.17	.29	.42	HE3S104K	.17	.29	.42	HE3C104K	.23	.36	.55	HE3D104K	.29	.42	.57	HE3E104K								
.12	.17	.29	.42	HE3S124K	.17	.29	.42	HE3C124K	.23	.36	.55	HE3D124K	.29	.42	.57	HE3E124K								
.15	.17	.29	.42	HE3S154K	.17	.29	.57	HE3C154K	.23	.36	.55	HE3D154K	.29	.42	.67	HE3E154K								
.18	.17	.29	.42	HE3S184K	.17	.29	.57	HE3C184K	.29	.42	.57	HE3D184K	.29	.42	.67	HE3E184K								
.22	.17	.29	.42	HE3S224K	.23	.36	.55	HE3C224K	.29	.42	.57	HE3D224K	.29	.42	.82	HE3E224K								
.25	.23	.36	.42	HE3S254K	.23	.36	.55	HE3C254K	.29	.42	.67	HE3D254K	.29	.42	.82	HE3E254K								
.27	.23	.36	.42	HE3S274K	.23	.36	.55	HE3C274K	.29	.42	.67	HE3D274K	.29	.42	.82	HE3E274K								
.33	.23	.36	.42	HE3S334K	.23	.36	.55	HE3C334K	.29	.42	.67	HE3D334K	.39	.54	.82	HE3E334K								
.39	.23	.36	.42	HE3S394K	.23	.36	.55	HE3C394K	.29	.42	.67	HE3D394K	.39	.54	.82	HE3E394K								
.47	.23	.36	.42	HE3S474K	.29	.42	.57	HE3C474K	.29	.42	.82	HE3D474K	.39	.54	.82	HE3E474K								
.50	.17	.29	.55	HE3S504K	.29	.42	.57	HE3C504K	.29	.42	.82	HE3D504K	.39	.54	.82	HE3E504K								
.56	.17	.29	.55	HE3S564K	.29	.42	.57	HE3C564K	.39	.54	.82	HE3D564K	.39	.54	1.04	HE3E564K								
.68	.23	.36	.55	HE3S684K	.29	.42	.57	HE3C684K	.39	.54	.82	HE3D684K	.39	.54	1.04	HE3E684K								
.75	.23	.36	.55	HE3S754K	.29	.42	.57	HE3C754K	.39	.54	.82	HE3D754K	.39	.54	1.19	HE3E754K								
.82	.23	.36	.55	HE3S824K	.29	.42	.67	HE3C824K	.39	.54	.82	HE3D824K	.39	.54	1.19	HE3E824K								
1.0	.23	.36	.55	HE3S105K	.29	.42	.67	HE3C105K	.39	.54	1.04	HE3D105K	.56	.72	1.24	HE3E105K								
1.2	.29	.42	.55	HE3S125K	.39	.54	.82	HE3C125K	.39	.54	1.19	HE3D125K	.56	.72	1.24	HE3E125K								
1.5	.29	.42	.55	HE3S155K	.39	.54	.82	HE3C155K	.39	.54	1.19	HE3D155K	.56	.72	1.24	HE3E155K								
1.8	.29	.42	.55	HE3S185K	.39	.54	.82	HE3C185K	.56	.72	1.24	HE3D185K	.56	.72	1.75	HE3E185K								
2.0	.29	.42	.67	HE3S205K	.39	.54	.82	HE3C205K	.56	.72	1.24	HE3D205K	.56	.72	1.75	HE3E205K								
3.0	.29	.42	.67	HE3S305K	.39	.54	1.04	HE3C305K	.56	.72	1.24	HE3D305K	.56	.72	1.75	HE3E305K								
4.0	.39	.54	.82	HE3S405K	.56	.72	1.24	HE3C405K	.56	.72	1.75	HE3D405K	.76	.96	1.75	HE3E405K								
5.0	.39	.54	.82	HE3S505K	.56	.72	1.24	HE3C505K	.56	.72	1.75	HE3D505K	.76	.96	1.75	HE3E505K								
6.0	.39	.54	.82	HE3S605K	.56	.72	1.24	HE3C605K	.56	.72	1.75	HE3D605K	.76	.96	1.75	HE3E605K								
8.0	.50	.68	1.04	HE3S805K	.56	.72	1.24	HE3C805K	.56	.72	1.75	HE3D805K	.97	1.21	1.75	HE3E805K								
10.0	.50	.68	1.04	HE3S106K	.56	.72	1.24	HE3C106K	.56	.72	1.75	HE3D106K	.97	1.21	1.75	HE3E106K								
12.0	.50	.68	1.24	HE3S126K	.56	.72	1.24	HE3C126K	.76	.96	1.75	HE3D126K	.97	1.21	2.25	HE3E126K								
15.0	.50	.68	1.24	HE3S156K	.56	.72	1.75	HE3C156K	.76	.96	1.75	HE3D156K	.97	1.21	2.25	HE3E156K								
20.0	.50	.68	1.24	HE3S206K	.56	.72	1.75	HE3C206K	.97	1.21	1.75	HE3D206K	1.23	1.60	2.25	HE3E206K								
30.0	.58	.79	1.24	HE3S306K	.76	.96	1.75	HE3C306K	.97	1.21	1.75	HE3D306K	1.59	1.81	2.25	HE3E306K								
40.0	.76	.96	1.24	HE3S406K	.76	.96	1.75	HE3C406K	.97	1.21	2.25	HE3D406K	1.88	2.36	3.25	HE3E406K								
50.0	.76	.96	1.24	HE3S506K	.76	.96	1.75	HE3C506K	1.23	1.60	2.25	HE3D506K	1.88	2.36	3.25	HE3E506K								
75.0	.97	1.21	1.50	HE3S756K	.97	1.21	1.75	HE3C756K	1.59	1.81	2.25	HE3D756K	1.88	2.36	3.25	HE3E756K								
100.0	.97	1.21	1.50	HE3S107K	1.23	1.60	1.75	HE3C107K	1.59	1.81	2.25	HE3D107K	2.18	2.27	3.25	HE3E107K								

Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches.



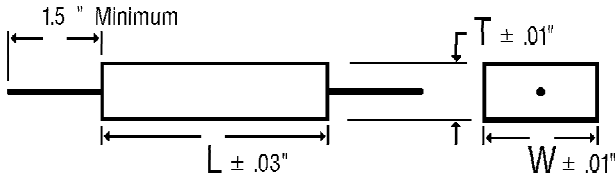
# METALLIZED POLYCARBONATE EPOXY CASE, AXIAL LEAD RECTANGULAR CAPACITORS



## HE3

METALLIZED POLYCARBONATE  
EPOXY CASE, AXIAL RECT.  
REGULAR SERIES

**DIMENSIONS** See tables for specific T, W, L values.



**WIRE SIZE** (Length 1.5" Minimum)

BODY LENGTH (L)	WIRE SIZE	
	AWG No.	Diameter
≤ 0.67"	24	0.020"
> 0.67" ≤ 1.06"	22	0.025"
> 1.06"	20	0.032"

**SELECTION AND ORDERING TABLES** Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	400VDC 230VAC				600VDC 275VAC				1000VDC 480VAC				1500VDC 750VAC				
	RATING	T	W	L	PART #	T	W	L	PART #	T	W	L	PART #	T	W	L	PART #
	±.01"	±.01"	±.03"		±.01"	±.01"	±.03"		±.01"	±.01"	±.03"		±.01"	±.01"	±.03"		
.001	.17	.29	.42	HE3G102K	.17	.29	.42	HE3J102K	.29	.42	1.06	HE3M102K	.29	.42	1.06	HE3P102K	
.0012	.17	.29	.42	HE3G122K	.17	.29	.42	HE3J122K	.29	.42	1.06	HE3M122K	.29	.42	1.06	HE3P122K	
.0015	.17	.29	.42	HE3G152K	.17	.29	.42	HE3J152K	.29	.42	1.06	HE3M152K	.29	.42	1.06	HE3P152K	
.0018	.17	.29	.42	HE3G182K	.17	.29	.42	HE3J182K	.29	.42	1.06	HE3M182K	.29	.42	1.06	HE3P182K	
.0022	.17	.29	.42	HE3G222K	.17	.29	.42	HE3J222K	.29	.42	1.06	HE3M222K	.29	.42	1.06	HE3P222K	
.0027	.17	.29	.42	HE3G272K	.17	.29	.42	HE3J272K	.29	.42	1.06	HE3M272K	.29	.42	1.06	HE3P272K	
.0033	.17	.29	.42	HE3G332K	.17	.29	.42	HE3J332K	.29	.42	1.06	HE3M332K	.29	.42	1.06	HE3P332K	
.0039	.17	.29	.42	HE3G392K	.17	.29	.57	HE3J392K	.29	.42	1.06	HE3M392K	.29	.42	1.06	HE3P392K	
.0047	.17	.29	.42	HE3G472K	.17	.29	.57	HE3J472K	.29	.42	1.06	HE3M472K	.29	.42	1.06	HE3P472K	
.0056	.17	.29	.57	HE3G562K	.17	.29	.57	HE3J562K	.29	.42	1.06	HE3M562K	.39	.54	1.06	HE3P562K	
.0068	.17	.29	.57	HE3G682K	.23	.36	.55	HE3J682K	.29	.42	1.06	HE3M682K	.39	.54	1.06	HE3P682K	
.0082	.17	.29	.57	HE3G822K	.23	.36	.55	HE3J822K	.29	.42	1.06	HE3M822K	.39	.54	1.06	HE3P822K	
.01	.17	.29	.57	HE3G103K	.23	.36	.55	HE3J103K	.29	.42	1.06	HE3M103K	.56	.72	1.06	HE3P103K	
.012	.23	.36	.55	HE3G123K	.23	.36	.55	HE3J123K	.29	.42	1.06	HE3M123K	.56	.72	1.06	HE3P123K	
.015	.23	.36	.55	HE3G153K	.29	.42	.57	HE3J153K	.39	.54	1.06	HE3M153K	.56	.72	1.06	HE3P153K	
.018	.23	.36	.55	HE3G183K	.29	.42	.57	HE3J183K	.39	.54	1.06	HE3M183K	.56	.72	1.06	HE3P183K	
.022	.29	.42	.57	HE3G223K	.29	.42	.67	HE3J223K	.39	.54	1.06	HE3M223K	.56	.72	1.35	HE3P223K	
.027	.29	.42	.57	HE3G273K	.29	.42	.67	HE3J273K	.56	.72	1.06	HE3M273K	.56	.72	1.35	HE3P273K	
.033	.29	.42	.67	HE3G333K	.29	.42	.82	HE3J333K	.56	.72	1.06	HE3M333K	.56	.72	1.35	HE3P333K	
.039	.29	.42	.67	HE3G393K	.29	.42	.82	HE3J393K	.56	.72	1.06	HE3M393K	.56	.72	1.35	HE3P393K	
.047	.29	.42	.67	HE3G473K	.39	.54	.82	HE3J473K	.56	.72	1.06	HE3M473K	.56	.72	1.75	HE3P473K	
.056	.29	.42	.82	HE3G563K	.39	.54	.82	HE3J563K	.56	.72	1.35	HE3M563K	.56	.72	1.75	HE3P563K	
.068	.29	.42	.82	HE3G683K	.39	.54	.82	HE3J683K	.56	.72	1.35	HE3M683K	.56	.72	1.75	HE3P683K	
.082	.39	.54	.82	HE3G823K	.39	.54	1.04	HE3J823K	.56	.72	1.35	HE3M823K	.76	.96	1.75	HE3P823K	
.10	.39	.54	.82	HE3G104K	.39	.54	1.04	HE3J104K	.56	.72	1.35	HE3M104K	.76	.96	1.75	HE3P104K	
.12	.39	.54	.82	HE3G124K	.39	.54	1.19	HE3J124K	.56	.72	1.35	HE3M124K	.97	1.21	1.75	HE3P124K	
.15	.39	.54	1.04	HE3G154K	.56	.72	1.24	HE3J154K	.76	.96	1.35	HE3M154K	.97	1.21	1.75	HE3P154K	
.18	.39	.54	1.04	HE3G184K	.56	.72	1.24	HE3J184K	.76	.96	1.35	HE3M184K	.97	1.21	1.75	HE3P184K	
.22	.39	.54	1.19	HE3G224K	.56	.72	1.24	HE3J224K	.76	.96	1.75	HE3M224K	1.23	1.60	1.75	HE3P224K	
.25	.56	.72	1.24	HE3G254K	.56	.72	1.24	HE3J254K	.76	.96	1.75	HE3M254K	1.23	1.60	1.75	HE3P254K	
.27	.56	.72	1.24	HE3G274K	.56	.72	1.24	HE3J274K	.76	.96	1.75	HE3M274K	1.23	1.60	1.75	HE3P274K	
.33	.56	.72	1.24	HE3G334K	.56	.72	1.75	HE3J334K	.97	1.21	1.75	HE3M334K	1.23	1.60	2.50	HE3P334K	
.39	.56	.72	1.24	HE3G394K	.56	.72	1.75	HE3J394K	.97	1.21	1.75	HE3M394K	1.23	1.60	2.50	HE3P394K	
.47	.56	.72	1.24	HE3G474K	.76	.96	1.75	HE3J474K	.97	1.21	1.75	HE3M474K	1.23	1.60	2.50	HE3P474K	
.50	.56	.72	1.75	HE3G504K	.76	.96	1.75	HE3J504K	.97	1.21	1.75	HE3M504K					
.56	.56	.72	1.75	HE3G564K	.76	.96	1.75	HE3J564K	1.23	1.60	1.75	HE3M564K					
.68	.56	.72	1.75	HE3G684K	.76	.96	1.75	HE3J684K	1.23	1.60	1.75	HE3M684K					
.75	.56	.72	1.75	HE3G754K	.76	.96	1.75	HE3J754K	1.23	1.60	1.75	HE3M754K					
.82	.76	.96	1.75	HE3G824K	.76	.96	1.75	HE3J824K	1.23	1.60	1.75	HE3M824K					
1.0	.76	.96	1.75	HE3G105K	.97	1.21	1.75	HE3J105K	1.23	1.60	2.50	HE3M105K					
1.2	.76	.96	1.75	HE3G125K	.97	1.21	1.75	HE3J125K	1.23	1.60	2.50	HE3M125K					
1.5	.76	.96	1.75	HE3G155K	1.23	1.60	1.75	HE3J155K	1.23	1.60	2.50	HE3M155K					
1.8	.97	1.21	1.75	HE3G185K	1.23	1.60	1.75	HE3J185K	1.59	1.81	2.50	HE3M185K					
2.0	.97	1.21	1.75	HE3G205K	1.23	1.60	1.75	HE3J205K	1.59	1.81	2.50	HE3M205K					
3.0	1.23	1.60	1.75	HE3G305K	1.23	1.60	2.25	HE3J305K	1.59	1.81	3.25	HE3M305K					
4.0	1.23	1.60	1.75	HE3G405K	1.59	1.81	2.25	HE3J405K	1.88	2.36	3.25	HE3M405K					
5.0	1.23	1.60	2.25	HE3G505K	1.59	1.81	2.25	HE3J505K	2.18	2.27	3.25	HE3M505K					
6.0	1.59	1.81	2.25	HE3G605K	1.88	2.36	2.25	HE3J605K									
8.0	1.59	1.81	2.25	HE3G805K	1.88	2.36	3.25	HE3J805K									
10.0	1.88	2.36	2.25	HE3G106K	1.88	2.36	3.25	HE3J106K									
12.0	1.88	2.36	2.25	HE3G126K	1.88	2.36	3.25	HE3J126K									
15.0	2.18	2.27	2.25	HE3G156K													

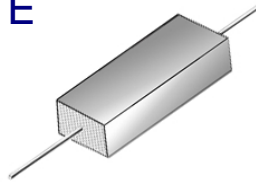
### TOLERANCE TABLE

Code	Tolerance
A	± 0.1% ♦
B	± 0.25% ♦
D	± 0.5% ♦
F	± 1% ♦
G	± 2% ♦
H	± 3% ♦
J	± 5%
K	± 10%
M	± 20%
N	± 30%
P	GMV
S	-10% +30%
T	-10% +50%
V	-10% +20%
X	Special

♦ Temperature Stabilized

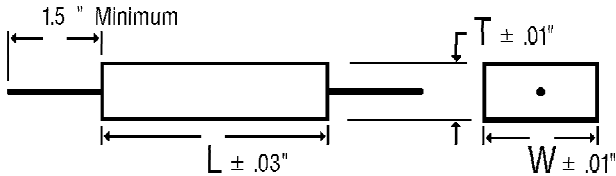
Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches.

# METALLIZED POLYCARBONATE EPOXY CASE, AXIAL LEAD, RECTANGULAR CAPACITORS



**HE2**  
METALLIZED POLYCARBONATE  
EPOXY CASE, AXIAL, RECT.  
MINIATURE SERIES

**DIMENSIONS** See tables for specific T, W, L values.



**WIRE SIZE** (Length 1.5" Minimum)

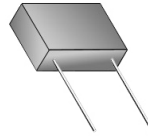
BODY LENGTH (L)	WIRE SIZE	
	AWG No.	Diameter
≤ 0.67"	24	0.020"
> 0.67" ≤ 1.06"	22	0.025"
> 1.06"	20	0.032"

**SELECTION AND ORDERING TABLES** Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	50VDC 40VAC				100VDC 70VAC				200VDC 120VAC				400VDC 230VAC						
	RATING	T	W	L	PART #	T	W	L	PART #	T	W	L	PART #	T	W	L	PART #		
	± .01"	± .01"	± .03"		± .01"	± .01"	± .03"		± .01"	± .01"	± .03"		± .01"	± .01"	± .03"		± .01"	± .01"	± .03"
.001	.17	.29	.42	HE2C102K	.17	.29	.42	HE2D102K	.17	.29	.42	HE2E102K	.17	.29	.42	HE2G102K			
.0012	.17	.29	.42	HE2C122K	.17	.29	.42	HE2D122K	.17	.29	.42	HE2E122K	.17	.29	.42	HE2G122K			
.0015	.17	.29	.42	HE2C152K	.17	.29	.42	HE2D152K	.17	.29	.42	HE2E152K	.17	.29	.42	HE2G152K			
.0018	.17	.29	.42	HE2C182K	.17	.29	.42	HE2D182K	.17	.29	.42	HE2E182K	.17	.29	.42	HE2G182K			
.0022	.17	.29	.42	HE2C222K	.17	.29	.42	HE2D222K	.17	.29	.42	HE2E222K	.17	.29	.42	HE2G222K			
.0027	.17	.29	.42	HE2C272K	.17	.29	.42	HE2D272K	.17	.29	.42	HE2E272K	.17	.29	.42	HE2G272K			
.0033	.17	.29	.42	HE2C332K	.17	.29	.42	HE2D332K	.17	.29	.42	HE2E332K	.17	.29	.42	HE2G332K			
.0039	.17	.29	.42	HE2C392K	.17	.29	.42	HE2D392K	.17	.29	.42	HE2E392K	.17	.29	.42	HE2G392K			
.0047	.17	.29	.42	HE2C472K	.17	.29	.42	HE2D472K	.17	.29	.42	HE2E472K	.17	.29	.42	HE2G472K			
.0056	.17	.29	.42	HE2C562K	.17	.29	.42	HE2D562K	.17	.29	.42	HE2E562K	.17	.29	.55	HE2G562K			
.0068	.17	.29	.42	HE2C682K	.17	.29	.42	HE2D682K	.17	.29	.42	HE2E682K	.17	.29	.55	HE2G682K			
.0082	.17	.29	.42	HE2C822K	.17	.29	.42	HE2D822K	.17	.29	.42	HE2E822K	.17	.29	.55	HE2G822K			
.01	.17	.29	.42	HE2C103K	.17	.29	.42	HE2D103K	.17	.29	.42	HE2E103K	.17	.29	.55	HE2G103K			
.012	.17	.29	.42	HE2C123K	.17	.29	.42	HE2D123K	.17	.29	.42	HE2E123K	.23	.36	.55	HE2G123K			
.015	.17	.29	.42	HE2C153K	.17	.29	.42	HE2D153K	.17	.29	.42	HE2E153K	.23	.36	.55	HE2G153K			
.018	.17	.29	.42	HE2C183K	.17	.29	.42	HE2D183K	.17	.29	.42	HE2E183K	.23	.36	.55	HE2G183K			
.022	.17	.29	.42	HE2C223K	.17	.29	.42	HE2D223K	.17	.29	.42	HE2E223K	.29	.42	.55	HE2G223K			
.027	.17	.29	.42	HE2C273K	.17	.29	.42	HE2D273K	.17	.29	.55	HE2E273K	.29	.42	.55	HE2G273K			
.033	.17	.29	.42	HE2C333K	.17	.29	.42	HE2D333K	.17	.29	.55	HE2E333K	.29	.42	.55	HE2G333K			
.039	.17	.29	.42	HE2C393K	.17	.29	.42	HE2D393K	.17	.29	.55	HE2E393K	.29	.42	.67	HE2G393K			
.047	.17	.29	.42	HE2C473K	.17	.29	.42	HE2D473K	.23	.36	.55	HE2E473K	.29	.42	.67	HE2G473K			
.056	.17	.29	.42	HE2C563K	.17	.29	.42	HE2D563K	.23	.36	.55	HE2E563K	.29	.42	.67	HE2G563K			
.068	.17	.29	.42	HE2C683K	.17	.29	.42	HE2D683K	.23	.36	.55	HE2E683K	.29	.42	.82	HE2G683K			
.082	.17	.29	.42	HE2C823K	.17	.29	.55	HE2D823K	.29	.42	.55	HE2E823K	.39	.54	.82	HE2G823K			
.10	.17	.29	.42	HE2C104K	.17	.29	.55	HE2D104K	.29	.42	.55	HE2E104K	.39	.54	.82	HE2G104K			
.12	.17	.29	.42	HE2C124K	.17	.29	.55	HE2D124K	.29	.42	.55	HE2E124K	.39	.54	.82	HE2G124K			
.15	.17	.29	.42	HE2C154K	.23	.36	.55	HE2D154K	.29	.42	.67	HE2E154K	.39	.54	1.04	HE2G154K			
.18	.17	.29	.55	HE2C184K	.23	.36	.55	HE2D184K	.29	.42	.67	HE2E184K	.39	.54	1.04	HE2G184K			
.22	.17	.29	.55	HE2C224K	.23	.36	.55	HE2D224K	.29	.42	.82	HE2E224K	.39	.54	1.24	HE2G224K			
.27	.17	.29	.55	HE2C274K	.29	.42	.55	HE2D274K	.39	.54	.82	HE2E274K	.39	.54	1.24	HE2G274K			
.33	.17	.29	.55	HE2C334K	.29	.42	.55	HE2D334K	.39	.54	.82	HE2E334K	.56	.72	1.24	HE2G334K			
.39	.23	.36	.55	HE2C394K	.29	.42	.55	HE2D394K	.39	.54	.82	HE2E394K	.56	.72	1.24	HE2G394K			
.47	.23	.36	.55	HE2C474K	.29	.42	.67	HE2D474K	.39	.54	.82	HE2E474K	.56	.72	1.24	HE2G474K			
.56	.23	.36	.55	HE2C564K	.29	.42	.67	HE2D564K	.39	.54	1.04	HE2E564K	.56	.72	1.24	HE2G564K			
.68	.23	.36	.55	HE2C684K	.29	.42	.82	HE2D684K	.39	.54	1.24	HE2E684K	.56	.72	1.50	HE2G684K			
.82	.29	.42	.55	HE2C824K	.39	.54	.82	HE2D824K	.39	.54	1.24	HE2E824K	.56	.72	1.75	HE2G824K			
1.0	.29	.42	.55	HE2C105K	.39	.54	.82	HE2D105K	.56	.72	1.24	HE2E105K	.56	.72	1.95	HE2G105K			
1.2	.29	.42	.67	HE2C125K	.39	.54	.82	HE2D125K	.56	.72	1.24	HE2E125K							
1.5	.29	.42	.67	HE2C155K	.39	.54	1.04	HE2D155K	.56	.72	1.24	HE2E155K							
1.8	.29	.42	.82	HE2C185K	.39	.54	1.04	HE2D185K	.56	.72	1.24	HE2E185K							
2.0	.39	.54	.82	HE2C205K	.39	.54	1.24	HE2D205K	.56	.72	1.24	HE2E205K							
2.5	.39	.54	.82	HE2C255K	.39	.54	1.24	HE2D255K	.56	.72	1.75	HE2E255K							
3.0	.39	.54	.82	HE2C305K	.39	.54	1.24	HE2D305K	.56	.72	1.75	HE2E305K							
3.5	.39	.54	.82	HE2C355K	.56	.72	1.24	HE2D355K	.56	.72	1.95	HE2E355K							
4.0	.39	.54	1.04	HE2C405K	.56	.72	1.24	HE2D405K											
4.5	.39	.54	1.04	HE2C455K	.56	.72	1.24	HE2D455K											
5.0	.39	.54	1.24	HE2C505K	.56	.72	1.24	HE2D505K											
6.0	.39	.54	1.24	HE2C605K	.56	.72	1.24	HE2D605K											
8.0	.56	.72	1.24	HE2C805K	.56	.72	1.50	HE2D805K											
10.0	.56	.72	1.24	HE2C106K															
12.0	.56	.72	1.24	HE2C126K															
15.0	.56	.72	1.24	HE2C156K															
18.0	.56	.72	1.50	HE2C186K															
20.0	.56	.72	1.50	HE2C206K															

Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches.

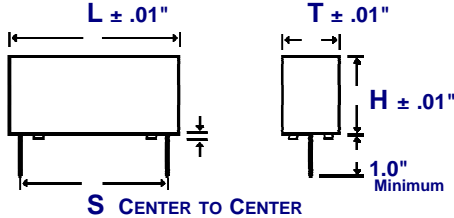
# METALLIZED POLYCARBONATE EPOXY CASE, RADIAL LEAD, RECTANGULAR CAPACITORS



## HF2

METALLIZED POLYCARBONATE  
EPOXY CASE, RADIAL, RECT.  
MINIATURE SERIES

**DIMENSIONS** See tables for specific T, H, L, S values.



\*\* The mounting pads consist of two individual pads on each end or one continuous pad on each end, depending on the mold. (Not an option).

**WIRE SIZE** (Length 1.0" Minimum)

BODY LENGTH (L)	LEAD SPACING (S) (C to C ± .01")	WIRE SIZE	
		AWG No.	Diameter
.42"	.300"	22	0.025"
.55"	.400"	22	0.025"
.67"	.500"	22	0.025"
.82"	.600"	22	0.025"
1.04"	.800"	22	0.025"
1.24"	1.100"	20	0.032"
1.75"	1.600"	20	0.032"

**SELECTION AND ORDERING TABLES** Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	50VDC 40VAC				100VDC 70VAC				200VDC 120VAC				400VDC 230VAC			
	RATING	T ± .01"	H ± .01"	L ± .01"	PART #	T ± .01"	H ± .01"	L ± .01"	PART #	T ± .01"	H ± .01"	L ± .01"	PART #	T ± .01"	H ± .01"	L ± .01"
.001	.18	.30	.42	HF2C102K	.18	.30	.42	HF2D102K	.18	.30	.42	HF2E102K	.18	.30	.42	HF2G102K
.0012	.18	.30	.42	HF2C122K	.18	.30	.42	HF2D122K	.18	.30	.42	HF2E122K	.18	.30	.42	HF2G122K
.0015	.18	.30	.42	HF2C152K	.18	.30	.42	HF2D152K	.18	.30	.42	HF2E152K	.18	.30	.42	HF2G152K
.0018	.18	.30	.42	HF2C182K	.18	.30	.42	HF2D182K	.18	.30	.42	HF2E182K	.18	.30	.42	HF2G182K
.0022	.18	.30	.42	HF2C222K	.18	.30	.42	HF2D222K	.18	.30	.42	HF2E222K	.18	.30	.42	HF2G222K
.0027	.18	.30	.42	HF2C272K	.18	.30	.42	HF2D272K	.18	.30	.42	HF2E272K	.18	.30	.42	HF2G272K
.0033	.18	.30	.42	HF2C332K	.18	.30	.42	HF2D332K	.18	.30	.42	HF2E332K	.18	.30	.42	HF2G332K
.0039	.18	.30	.42	HF2C392K	.18	.30	.42	HF2D392K	.18	.30	.42	HF2E392K	.18	.30	.42	HF2G392K
.0047	.18	.30	.42	HF2C472K	.18	.30	.42	HF2D472K	.18	.30	.42	HF2E472K	.18	.30	.42	HF2G472K
.0056	.18	.30	.42	HF2C562K	.18	.30	.42	HF2D562K	.18	.30	.42	HF2E562K	.18	.30	.55	HF2G562K
.0068	.18	.30	.42	HF2C682K	.18	.30	.42	HF2D682K	.18	.30	.42	HF2E682K	.18	.30	.55	HF2G682K
.0082	.18	.30	.42	HF2C822K	.18	.30	.42	HF2D822K	.18	.30	.42	HF2E822K	.18	.30	.55	HF2G822K
.01	.18	.30	.42	HF2C103K	.18	.30	.42	HF2D103K	.18	.30	.42	HF2E103K	.18	.30	.55	HF2G103K
.012	.18	.30	.42	HF2C123K	.18	.30	.42	HF2D123K	.18	.30	.42	HF2E123K	.18	.30	.55	HF2G123K
.015	.18	.30	.42	HF2C153K	.18	.30	.42	HF2D153K	.18	.30	.42	HF2E153K	.24	.37	.55	HF2G153K
.018	.18	.30	.42	HF2C183K	.18	.30	.42	HF2D183K	.18	.30	.42	HF2E183K	.24	.37	.55	HF2G183K
.022	.18	.30	.42	HF2C223K	.18	.30	.42	HF2D223K	.18	.30	.42	HF2E223K	.24	.37	.55	HF2G223K
.027	.18	.30	.42	HF2C273K	.18	.30	.42	HF2D273K	.18	.30	.55	HF2E273K	.30	.43	.55	HF2G273K
.033	.18	.30	.42	HF2C333K	.18	.30	.42	HF2D333K	.18	.30	.55	HF2E333K	.30	.43	.55	HF2G333K
.039	.18	.30	.42	HF2C393K	.18	.30	.42	HF2D393K	.18	.30	.55	HF2E393K	.30	.43	.67	HF2G393K
.047	.18	.30	.42	HF2C473K	.18	.30	.42	HF2D473K	.18	.30	.55	HF2E473K	.30	.43	.67	HF2G473K
.056	.18	.30	.42	HF2C563K	.18	.30	.42	HF2D563K	.24	.37	.55	HF2E563K	.30	.43	.67	HF2G563K
.068	.18	.30	.42	HF2C683K	.18	.30	.42	HF2D683K	.24	.37	.55	HF2E683K	.30	.43	.82	HF2G683K
.082	.18	.30	.42	HF2C823K	.18	.30	.55	HF2D823K	.24	.37	.55	HF2E823K	.30	.43	.82	HF2G823K
.10	.18	.30	.42	HF2C104K	.18	.30	.55	HF2D104K	.24	.37	.55	HF2E104K	.40	.55	.82	HF2G104K
.12	.18	.30	.42	HF2C124K	.18	.30	.55	HF2D124K	.30	.43	.55	HF2E124K	.40	.55	.82	HF2G124K
.15	.18	.30	.42	HF2C154K	.18	.30	.55	HF2D154K	.30	.43	.55	HF2E154K	.40	.55	1.04	HF2G154K
.18	.18	.30	.55	HF2C184K	.24	.37	.55	HF2D184K	.30	.43	.67	HF2E184K	.40	.55	1.04	HF2G184K
.22	.18	.30	.55	HF2C224K	.24	.37	.55	HF2D224K	.30	.43	.67	HF2E224K	.40	.55	1.24	HF2G224K
.27	.18	.30	.55	HF2C274K	.24	.37	.55	HF2D274K	.30	.43	.82	HF2E274K	.40	.55	1.24	HF2G274K
.33	.18	.30	.55	HF2C334K	.30	.43	.55	HF2D334K	.40	.55	.82	HF2E334K	.57	.73	1.24	HF2G334K
.39	.18	.30	.55	HF2C394K	.30	.43	.55	HF2D394K	.40	.55	.82	HF2E394K	.57	.73	1.24	HF2G394K
.47	.24	.37	.55	HF2C474K	.30	.43	.67	HF2D474K	.40	.55	.82	HF2E474K	.57	.73	1.24	HF2G474K
.56	.24	.37	.55	HF2C564K	.30	.43	.67	HF2D564K	.40	.55	1.04	HF2E564K	.57	.73	1.24	HF2G564K
.68	.24	.37	.55	HF2C684K	.30	.43	.82	HF2D684K	.40	.55	1.24	HF2E684K	.57	.73	1.75	HF2G684K
.82	.30	.43	.55	HF2C824K	.40	.55	.82	HF2D824K	.40	.55	1.24	HF2E824K	.57	.73	1.75	HF2G824K
1.0	.30	.43	.55	HF2C105K	.40	.55	.82	HF2D105K	.40	.55	1.24	HF2E105K				
1.2	.30	.43	.67	HF2C125K	.40	.55	.82	HF2D125K	.57	.73	1.24	HF2E125K				
1.5	.30	.43	.67	HF2C155K	.40	.55	1.04	HF2D155K	.57	.73	1.24	HF2E155K				
1.8	.30	.43	.82	HF2C185K	.40	.55	1.04	HF2D185K	.57	.73	1.24	HF2E185K				
2.0	.30	.43	.82	HF2C205K	.40	.55	1.24	HF2D205K	.57	.73	1.24	HF2E205K				
2.5	.40	.55	.82	HF2C255K	.40	.55	1.24	HF2D255K	.57	.73	1.75	HF2E255K				
3.0	.40	.55	.82	HF2C305K	.40	.55	1.24	HF2D305K	.57	.73	1.75	HF2E305K				
3.5	.40	.55	.82	HF2C355K	.57	.73	1.24	HF2D355K	.57	.73	1.75	HF2E355K				
4.0	.40	.55	1.04	HF2C405K	.57	.73	1.24	HF2D405K								
4.5	.40	.55	1.04	HF2C455K	.57	.73	1.24	HF2D455K								
5.0	.40	.55	1.24	HF2C505K	.57	.73	1.24	HF2D505K								
6.0	.40	.55	1.24	HF2C605K	.57	.73	1.24	HF2D605K								
8.0	.40	.55	1.24	HF2C805K	.57	.73	1.75	HF2D805K								
10.0	.57	.73	1.24	HF2C106K												
12.0	.57	.73	1.24	HF2C126K												
15.0	.57	.73	1.24	HF2C156K												
18.0	.57	.73	1.75	HF2C186K												
20.0	.57	.73	1.75	HF2C206K												

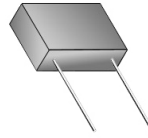
### TOLERANCE TABLE

Code	Tolerance
A	± 0.1% ♦
B	± 0.25% ♦
D	± 0.5% ♦
F	± 1% ♦
G	± 2% ♦
H	± 3% ♦
J	± 5%
K	± 10%
M	± 20%
N	± 30%
P	GMV
S	-10% +30%
T	-10% +50%
V	-10% +20%
X	Special

♦ Temperature Stabilized

Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches.

# METALLIZED POLYCARBONATE EPOXY CASE, RADIAL LEAD, RECTANGULAR CAPACITORS



**HF3**  
METALLIZED POLYCARBONATE  
EPOXY CASE, RADIAL, RECT.  
REGULAR SERIES

## ORDERING DESCRIPTION

Capacitor, fixed: Metallized Polycarbonate dielectric; extended foil construction; tin-plated copper-clad steel wire radial leads; encased in a molded epoxy/plastic shell with epoxy fill.

## APPLICATION NOTES

Epoxy Case capacitors are not intended for exposure to high humidity conditions over extended periods of time. For stringent environmental conditions, Epoxy Case capacitors should be used in encapsulated or hermetically sealed circuitry.

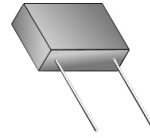
## SELECTION AND ORDERING TABLES Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	35VDC 20VAC				50VDC 40VAC				100VDC 70VAC				200VDC 120VAC			
	T	H	L	PART #	T	H	L	PART #	T	H	L	PART #	T	H	L	PART #
RATING	± .01"	± .01"	± .01"		± .01"	± .01"	± .01"		± .01"	± .01"	± .01"		± .01"	± .01"	± .01"	
.001	.18	.30	.42	HF3S102K	.18	.30	.42	HF3C102K	.18	.30	.42	HF3D102K	.18	.30	.42	HF3E102K
.0012	.18	.30	.42	HF3S122K	.18	.30	.42	HF3C122K	.18	.30	.42	HF3D122K	.18	.30	.42	HF3E122K
.0018	.18	.30	.42	HF3S182K	.18	.30	.42	HF3C182K	.18	.30	.42	HF3D182K	.18	.30	.42	HF3E182K
.0022	.18	.30	.42	HF3S222K	.18	.30	.42	HF3C222K	.18	.30	.42	HF3D222K	.18	.30	.42	HF3E222K
.0027	.18	.30	.42	HF3S272K	.18	.30	.42	HF3C272K	.18	.30	.42	HF3D272K	.18	.30	.42	HF3E272K
.0033	.18	.30	.42	HF3S332K	.18	.30	.42	HF3C332K	.18	.30	.42	HF3D332K	.18	.30	.42	HF3E332K
.0047	.18	.30	.42	HF3S472K	.18	.30	.42	HF3C472K	.18	.30	.42	HF3D472K	.18	.30	.42	HF3E472K
.0056	.18	.30	.42	HF3S562K	.18	.30	.42	HF3C562K	.18	.30	.42	HF3D562K	.18	.30	.42	HF3E562K
.0068	.18	.30	.42	HF3S682K	.18	.30	.42	HF3C682K	.18	.30	.42	HF3D682K	.18	.30	.42	HF3E682K
.0082	.18	.30	.42	HF3S822K	.18	.30	.42	HF3C822K	.18	.30	.42	HF3D822K	.18	.30	.42	HF3E822K
.01	.18	.30	.42	HF3S103K	.18	.30	.42	HF3C103K	.18	.30	.42	HF3D103K	.18	.30	.42	HF3E103K
.012	.18	.30	.42	HF3S123K	.18	.30	.42	HF3C123K	.18	.30	.42	HF3D123K	.18	.30	.42	HF3E123K
.015	.18	.30	.42	HF3S153K	.18	.30	.42	HF3C153K	.18	.30	.42	HF3D153K	.18	.30	.42	HF3E153K
.018	.18	.30	.42	HF3S183K	.18	.30	.42	HF3C183K	.18	.30	.42	HF3D183K	.18	.30	.42	HF3E183K
.022	.18	.30	.42	HF3S223K	.18	.30	.42	HF3C223K	.18	.30	.42	HF3D223K	.18	.30	.55	HF3E223K
.027	.18	.30	.42	HF3S273K	.18	.30	.42	HF3C273K	.18	.30	.42	HF3D273K	.18	.30	.55	HF3E273K
.033	.18	.30	.42	HF3S333K	.18	.30	.42	HF3C333K	.18	.30	.42	HF3D333K	.18	.30	.55	HF3E333K
.039	.18	.30	.42	HF3S393K	.18	.30	.42	HF3C393K	.18	.30	.42	HF3D393K	.18	.30	.55	HF3E393K
.047	.18	.30	.42	HF3S473K	.18	.30	.42	HF3C473K	.18	.30	.55	HF3D473K	.24	.37	.55	HF3E473K
.056	.18	.30	.42	HF3S563K	.18	.30	.42	HF3C563K	.18	.30	.55	HF3D563K	.24	.37	.55	HF3E563K
.068	.18	.30	.42	HF3S683K	.18	.30	.42	HF3C683K	.18	.30	.55	HF3D683K	.24	.37	.55	HF3E683K
.082	.18	.30	.42	HF3S823K	.18	.30	.42	HF3C823K	.24	.37	.55	HF3D823K	.30	.43	.55	HF3E823K
.10	.18	.30	.42	HF3S104K	.18	.30	.42	HF3C104K	.24	.37	.55	HF3D104K	.30	.43	.55	HF3E104K
.12	.18	.30	.42	HF3S124K	.18	.30	.42	HF3C124K	.24	.37	.55	HF3D124K	.30	.43	.55	HF3E124K
.15	.18	.30	.42	HF3S154K	.18	.30	.55	HF3C154K	.24	.37	.55	HF3D154K	.30	.43	.67	HF3E154K
.18	.18	.30	.42	HF3S184K	.18	.30	.55	HF3C184K	.30	.43	.55	HF3D184K	.30	.43	.67	HF3E184K
.22	.18	.30	.42	HF3S224K	.24	.37	.55	HF3C224K	.30	.43	.55	HF3D224K	.30	.43	.82	HF3E224K
.25	.18	.30	.42	HF3S254K	.24	.37	.55	HF3C254K	.30	.43	.67	HF3D254K	.30	.43	.82	HF3E254K
.27	.18	.30	.42	HF3S274K	.24	.37	.55	HF3C274K	.30	.43	.67	HF3D274K	.30	.43	.82	HF3E274K
.33	.18	.30	.42	HF3S334K	.24	.37	.55	HF3C334K	.30	.43	.67	HF3D334K	.40	.55	.82	HF3E334K
.39	.18	.30	.55	HF3S394K	.24	.37	.55	HF3C394K	.30	.43	.67	HF3D394K	.40	.55	.82	HF3E394K
.47	.18	.30	.55	HF3S474K	.24	.37	.55	HF3C474K	.30	.43	.82	HF3D474K	.40	.55	.82	HF3E474K
.50	.18	.30	.55	HF3S504K	.30	.43	.55	HF3C504K	.30	.43	.82	HF3D504K	.40	.55	.82	HF3E504K
.56	.18	.30	.55	HF3S564K	.30	.43	.55	HF3C564K	.40	.55	.82	HF3D564K	.40	.55	1.04	HF3E564K
.68	.24	.37	.55	HF3S684K	.30	.43	.55	HF3C684K	.40	.55	.82	HF3D684K	.40	.55	1.04	HF3E684K
.75	.24	.37	.55	HF3S754K	.30	.43	.55	HF3C754K	.40	.55	.82	HF3D754K	.40	.55	1.24	HF3E754K
.82	.24	.37	.55	HF3S824K	.30	.43	.67	HF3C824K	.40	.55	.82	HF3D824K	.40	.55	1.24	HF3E824K
1.0	.24	.37	.55	HF3S105K	.30	.43	.67	HF3C105K	.40	.55	1.04	HF3D105K	.57	.73	1.24	HF3E105K
1.2	.24	.37	.55	HF3S125K	.40	.55	.82	HF3C125K	.40	.55	1.24	HF3D125K	.57	.73	1.24	HF3E125K
1.5	.30	.43	.55	HF3S155K	.40	.55	.82	HF3C155K	.40	.55	1.24	HF3D155K	.57	.73	1.24	HF3E155K
1.8	.30	.43	.55	HF3S185K	.40	.55	.82	HF3C185K	.57	.73	1.24	HF3D185K	.57	.73	1.75	HF3E185K
2.0	.30	.43	.67	HF3S205K	.40	.55	.82	HF3C205K	.57	.73	1.24	HF3D205K	.57	.73	1.75	HF3E205K
3.0	.30	.43	.67	HF3S305K	.40	.55	1.04	HF3C305K	.57	.73	1.24	HF3D305K	.57	.73	1.75	HF3E305K
4.0	.30	.43	.82	HF3S405K	.57	.73	1.24	HF3C405K	.57	.73	1.75	HF3D405K	.70	1.13	1.75	HF3E405K
5.0	.40	.55	.82	HF3S505K	.57	.73	1.24	HF3C505K	.57	.73	1.75	HF3D505K	.70	1.13	1.75	HF3E505K
6.0	.40	.55	.82	HF3S605K	.57	.73	1.24	HF3C605K	.57	.73	1.75	HF3D605K	.80	1.13	1.75	HF3E605K
8.0	.40	.55	1.04	HF3S805K	.57	.73	1.24	HF3C805K	.57	.73	1.75	HF3D805K	.80	1.13	1.75	HF3E805K
10.0	.40	.55	1.04	HF3S106K	.57	.73	1.24	HF3C106K	.70	1.13	1.75	HF3D106K	1.27	1.40	1.77	HF3E106K
12.0	.57	.73	1.24	HF3S126K	.57	.73	1.24	HF3C126K	.70	1.13	1.75	HF3D126K	1.27	1.40	1.77	HF3E126K
15.0	.57	.73	1.24	HF3S156K	.57	.73	1.75	HF3C156K	.70	1.13	1.75	HF3D156K	1.27	1.40	1.77	HF3E156K
18.0	.57	.73	1.24	HF3S186K	.57	.73	1.75	HF3C186K	.80	1.13	1.75	HF3D186K				
20.0	.57	.73	1.24	HF3S206K	.57	.73	1.75	HF3C206K	.80	1.13	1.75	HF3D206K				

Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches.



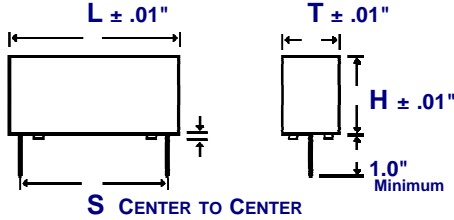
# METALLIZED POLYCARBONATE EPOXY CASE, RADIAL LEAD, RECTANGULAR CAPACITORS



## HF3

METALLIZED POLYCARBONATE  
EPOXY CASE, RADIAL, RECT.  
REGULAR SERIES

**DIMENSIONS** See tables for specific T, H, L, S values.



\*\* The mounting pads consist of two individual pads on each end or one continuous pad on each end, depending on the mold. (Not an option).

**WIRE SIZE** (Length 1.0" Minimum)

BODY LENGTH (L)	LEAD SPACING (S) (C to C ± .01")	WIRE SIZE	
		AWG No.	Diameter
.42"	.300"	22	0.025"
.55"	.400"	22	0.025"
.67"	.500"	22	0.025"
.82"	.600"	22	0.025"
1.04"	.800"	22	0.025"
1.24"	1.100"	20	0.032"
1.75"	1.600"	20	0.032"

**SELECTION AND ORDERING TABLES** Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	400VDC 230VAC				600VDC 275VAC				1000VDC 480VAC				1500VDC 750VAC				
	RATING	T	H	L	PART #	T	H	L	PART #	T	H	L	PART #	T	H	L	PART #
	± .01"	± .01"	± .01"		± .01"	± .01"	± .01"		± .01"	± .01"	± .01"		± .01"	± .01"	± .01"		
.001	.18	.30	.42	HF3G102K	.18	.30	.42	HF3J102K	.40	.55	1.04	HF3M102K	.40	.55	1.04	HF3P102K	
.0012	.18	.30	.42	HF3G122K	.18	.30	.42	HF3J122K	.40	.55	1.04	HF3M122K	.40	.55	1.04	HF3P122K	
.0015	.18	.30	.42	HF3G152K	.18	.30	.42	HF3J152K	.40	.55	1.04	HF3M152K	.40	.55	1.04	HF3P152K	
.0018	.18	.30	.42	HF3G182K	.18	.30	.42	HF3J182K	.40	.55	1.04	HF3M182K	.40	.55	1.04	HF3P182K	
.0022	.18	.30	.42	HF3G222K	.18	.30	.42	HF3J222K	.40	.55	1.04	HF3M222K	.40	.55	1.04	HF3P222K	
.0027	.18	.30	.42	HF3G272K	.18	.30	.42	HF3J272K	.40	.55	1.04	HF3M272K	.40	.55	1.04	HF3P272K	
.0033	.18	.30	.42	HF3G332K	.18	.30	.42	HF3J332K	.40	.55	1.04	HF3M332K	.40	.55	1.04	HF3P332K	
.0039	.18	.30	.42	HF3G392K	.18	.30	.55	HF3J392K	.40	.55	1.04	HF3M392K	.40	.55	1.04	HF3P392K	
.0047	.18	.30	.42	HF3G472K	.18	.30	.55	HF3J472K	.40	.55	1.04	HF3M472K	.40	.55	1.04	HF3P472K	
.0056	.18	.30	.55	HF3G562K	.18	.30	.55	HF3J562K	.40	.55	1.04	HF3M562K	.40	.55	1.04	HF3P562K	
.0068	.18	.30	.55	HF3G682K	.24	.37	.55	HF3J682K	.40	.55	1.04	HF3M682K	.40	.55	1.04	HF3P682K	
.0082	.18	.30	.55	HF3G822K	.24	.37	.55	HF3J822K	.40	.55	1.04	HF3M822K	.40	.55	1.04	HF3P822K	
.01	.18	.30	.55	HF3G103K	.24	.37	.55	HF3J103K	.40	.55	1.04	HF3M103K	.57	.73	1.24	HF3P103K	
.012	.24	.37	.55	HF3G123K	.24	.37	.55	HF3J123K	.40	.55	1.04	HF3M123K	.57	.73	1.24	HF3P123K	
.015	.24	.37	.55	HF3G153K	.30	.43	.55	HF3J153K	.40	.55	1.04	HF3M153K	.57	.73	1.24	HF3P153K	
.018	.24	.37	.55	HF3G183K	.30	.43	.55	HF3J183K	.40	.55	1.04	HF3M183K	.57	.73	1.24	HF3P183K	
.022	.30	.43	.55	HF3G223K	.30	.43	.67	HF3J223K	.40	.55	1.04	HF3M223K	.57	.73	1.75	HF3P223K	
.027	.30	.43	.55	HF3G273K	.30	.43	.67	HF3J273K	.57	.73	1.24	HF3M273K	.57	.73	1.75	HF3P273K	
.033	.30	.43	.67	HF3G333K	.30	.43	.82	HF3J333K	.57	.73	1.24	HF3M333K	.57	.73	1.75	HF3P333K	
.039	.30	.43	.67	HF3G393K	.30	.43	.82	HF3J393K	.57	.73	1.24	HF3M393K	.57	.73	1.75	HF3P393K	
.047	.30	.43	.67	HF3G473K	.40	.55	.82	HF3J473K	.57	.73	1.24	HF3M473K	.57	.73	1.75	HF3P473K	
.056	.30	.43	.82	HF3G563K	.40	.55	.82	HF3J563K	.57	.73	1.75	HF3M563K	.57	.73	1.75	HF3P563K	
.068	.30	.43	.82	HF3G683K	.40	.55	.82	HF3J683K	.57	.73	1.75	HF3M683K	.70	1.13	1.75	HF3P683K	
.082	.40	.55	.82	HF3G823K	.40	.55	1.04	HF3J823K	.57	.73	1.75	HF3M823K	.70	1.13	1.75	HF3P823K	
.10	.40	.55	.82	HF3G104K	.40	.55	1.04	HF3J104K	.57	.73	1.75	HF3M104K	.70	1.13	1.75	HF3P104K	
.12	.40	.55	.82	HF3G124K	.40	.55	1.24	HF3J124K	.57	.73	1.75	HF3M124K	.80	1.13	1.75	HF3P124K	
.15	.40	.55	1.04	HF3G154K	.57	.73	1.24	HF3J154K	.57	.73	1.75	HF3M154K	.80	1.13	1.75	HF3P154K	
.18	.40	.55	1.04	HF3G184K	.57	.73	1.24	HF3J184K	.70	1.13	1.75	HF3M184K	1.27	1.40	1.77	HF3P184K	
.22	.40	.55	1.24	HF3G224K	.57	.73	1.24	HF3J224K	.70	1.13	1.75	HF3M224K	1.27	1.40	1.77	HF3P224K	
.25	.57	.73	1.24	HF3G254K	.57	.73	1.24	HF3J254K	.70	1.13	1.75	HF3M254K	1.27	1.40	1.77	HF3P254K	
.27	.57	.73	1.24	HF3G274K	.57	.73	1.24	HF3J274K	.70	1.13	1.75	HF3M274K	1.27	1.40	1.77	HF3P274K	
.33	.57	.73	1.24	HF3G334K	.57	.73	1.75	HF3J334K	.80	1.13	1.75	HF3M334K					
.39	.57	.73	1.24	HF3G394K	.57	.73	1.75	HF3J394K	1.27	1.40	1.77	HF3M394K					
.47	.57	.73	1.24	HF3G474K	.70	1.13	1.75	HF3J474K	1.27	1.40	1.77	HF3M474K					
.50	.57	.73	1.75	HF3G504K	.70	1.13	1.75	HF3J504K	1.27	1.40	1.77	HF3M504K					
.56	.57	.73	1.75	HF3G564K	.70	1.13	1.75	HF3J564K	1.27	1.40	1.77	HF3M564K					
.68	.57	.73	1.75	HF3G684K	.70	1.13	1.75	HF3J684K	1.27	1.40	1.77	HF3M684K					
.75	.57	.73	1.75	HF3G754K	.70	1.13	1.75	HF3J754K	1.27	1.40	1.77	HF3M754K					
.82	.70	1.13	1.75	HF3G824K	.70	1.13	1.75	HF3J824K									
1.0	.70	1.13	1.75	HF3G105K	.80	1.13	1.75	HF3J105K									
1.2	.70	1.13	1.75	HF3G125K	1.27	1.40	1.77	HF3J125K									
1.5	.80	1.13	1.75	HF3G155K	1.27	1.40	1.77	HF3J155K									
1.8	.80	1.13	1.75	HF3G185K	1.27	1.40	1.77	HF3J185K									
2.0	1.27	1.40	1.77	HF3G205K	1.27	1.40	1.77	HF3J205K									
3.0	1.27	1.40	1.77	HF3G305K													
4.0	1.27	1.40	1.77	HF3G405K													

### TOLERANCE TABLE

Code	Tolerance
A	± 0.1% ♦
B	± 0.25% ♦
D	± 0.5% ♦
F	± 1% ♦
G	± 2% ♦
H	± 3% ♦
J	± 5%
K	± 10%
M	± 20%
N	± 30%
P	GMV
S	-10% +30%
T	-10% +50%
V	-10% +20%
X	Special

♦ Temperature Stabilized

Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches.

# METALLIZED POLYCARBONATE FEED THROUGH, CAPACITORS, SKIN TIGHT PLASTIC WRAP, WITH SOLDERABLE ENDS



## HQ3

METALLIZED POLYCARBONATE  
FEED THROUGH, ROUND  
REGULAR SERIES

### ORDERING DESCRIPTION

Capacitor, fixed: Metallized Polycarbonate dielectric; extended foil construction; Feed Through; encased in skin-tight plastic wrap, with solderable ends. Capacitors are wound on hollow cores for wire or stud insertion through the center axis of the capacitor.

### APPLICATION NOTES

These tables are intended to give the engineer a starting point for ordering custom sizes and values. Standard core sizes are .120", .250", .375", .500", .625", .750" and 1.000" I.D. Other core sizes are available. Custom configurations are the norm for feed through capacitors. Please do not hesitate to specify your unique requirements, specify capacitance, tolerance, voltage, maximum length, maximum diameter, minimum I.D. of core, core material and core extension.

### SELECTION AND ORDERING TABLES Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	100VDC 70VAC				200VDC 120VAC				400VDC 230VAC				600VDC 275VAC			
	I	D	L	PART #	I	D	L	PART #	I	D	L	PART #	I	D	L	PART #
RATING	± .05"	+ .05"	± .07"		± .05"	+ .05"	± .07"		± .05"	+ .05"	± .07"		± .05"	+ .05"	± .07"	
<b>Teflon Tube Core</b>				<b>.120" I.D. x .130" O.D.</b>				<b>CORE CODE 1</b>								
.01	.12	.45	.32	HQ31D103K	.12	.45	.32	HQ31E103K	.12	.45	.32	HQ31G103K	.12	.45	.32	HQ31J103K
.015	.12	.45	.32	HQ31D153K	.12	.45	.32	HQ31E153K	.12	.45	.32	HQ31G153K	.12	.45	.32	HQ31J153K
.027	.12	.45	.32	HQ31D273K	.12	.45	.32	HQ31E273K	.12	.45	.32	HQ31G273K	.12	.54	.32	HQ31J273K
.033	.12	.45	.32	HQ31D333K	.12	.45	.32	HQ31E333K	.12	.46	.32	HQ31G333K	.12	.60	.32	HQ31J333K
.047	.12	.45	.32	HQ31D473K	.12	.45	.32	HQ31E473K	.12	.54	.32	HQ31G473K	.12	.49	.45	HQ31J473K
.056	.12	.45	.32	HQ31D563K	.12	.45	.32	HQ31E563K	.12	.59	.32	HQ31G563K	.12	.54	.45	HQ31J563K
.068	.12	.45	.32	HQ31D683K	.12	.45	.32	HQ31E683K	.12	.64	.32	HQ31G683K	.12	.59	.45	HQ31J683K
.082	.12	.45	.32	HQ31D823K	.12	.48	.32	HQ31E823K	.12	.49	.45	HQ31G823K	.12	.64	.45	HQ31J823K
.10	.12	.45	.32	HQ31D104K	.12	.48	.32	HQ31E104K	.12	.54	.45	HQ31G104K	.12	.70	.45	HQ31J104K
.15	.12	.45	.32	HQ31D154K	.12	.49	.32	HQ31E154K	.12	.64	.45	HQ31G154K	.12	.85	.45	HQ31J154K
.22	.12	.45	.32	HQ31D224K	.12	.58	.32	HQ31E224K	.12	.78	.45	HQ31G224K	.12	.83	.57	HQ31J224K
.27	.12	.45	.32	HQ31D274K	.12	.63	.32	HQ31E274K	.12	.86	.45	HQ31G274K	.12	.92	.57	HQ31J274K
.33	.12	.45	.32	HQ31D334K	.12	.49	.45	HQ31E334K	.12	.77	.57	HQ31G334K	.12	1.01	.57	HQ31J334K
.47	.12	.51	.32	HQ31D474K	.12	.59	.45	HQ31E474K	.12	.91	.57	HQ31G474K	.12	1.05	.70	HQ31J474K
.56	.12	.54	.32	HQ31D564K	.12	.63	.45	HQ31E564K	.12	.99	.57	HQ31G564K	.12	1.14	.70	HQ31J564K
.68	.12	.60	.32	HQ31D684K	.12	.69	.45	HQ31E684K	.12	1.09	.57	HQ31G684K	.12	1.25	.70	HQ31J684K
.82	.12	.64	.32	HQ31D824K	.12	.75	.45	HQ31E824K	.12	1.04	.70	HQ31G824K	.12	1.22	.82	HQ31J824K
1.0	.12	.51	.45	HQ31D105K	.12	.83	.45	HQ31E105K	.12	1.14	.70	HQ31G105K	.12	1.35	.82	HQ31J105K
1.5	.12	.61	.45	HQ31D155K	.12	.82	.57	HQ31E155K	.12	1.24	.82	HQ31G155K	.12	1.39	1.07	HQ31J155K
2.0	.12	.69	.45	HQ31D205K	.12	.94	.57	HQ31E205K	.12	1.43	.82	HQ31G205K	.12	1.61	1.07	HQ31J205K
<b>Paper Tube Core</b>				<b>.250" I.D. x .315" O.D.</b>				<b>CORE CODE 2</b>								
.10	.25	.65	.32	HQ32D104K	.25	.65	.32	HQ32E104K	.25	.83	.32	HQ32G104K	.25	.77	.45	HQ32J104K
.12	.25	.65	.32	HQ32D124K	.25	.65	.32	HQ32E124K	.25	.67	.45	HQ32G124K	.25	.83	.45	HQ32J124K
.15	.25	.65	.32	HQ32D154K	.25	.65	.32	HQ32E154K	.25	.72	.45	HQ32G154K	.25	.91	.45	HQ32J154K
.18	.25	.65	.32	HQ32D184K	.25	.65	.32	HQ32E184K	.25	.77	.45	HQ32G184K	.25	.98	.45	HQ32J184K
.22	.25	.66	.32	HQ32D224K	.25	.66	.32	HQ32E224K	.25	.84	.45	HQ32G224K	.25	.90	.57	HQ32J224K
.27	.25	.66	.32	HQ32D274K	.25	.71	.32	HQ32E274K	.25	.91	.45	HQ32G274K	.25	.97	.57	HQ32J274K
.33	.25	.67	.32	HQ32D334K	.25	.77	.32	HQ32E334K	.25	.99	.45	HQ32G334K	.25	1.06	.57	HQ32J334K
.47	.25	.67	.32	HQ32D474K	.25	.89	.32	HQ32E474K	.25	.97	.57	HQ32G474K	.25	1.24	.57	HQ32J474K
.56	.25	.67	.32	HQ32D564K	.25	.70	.45	HQ32E564K	.25	1.04	.57	HQ32G564K	.25	1.17	.70	HQ32J564K
.68	.25	.68	.32	HQ32D684K	.25	.76	.45	HQ32E684K	.25	1.14	.57	HQ32G684K	.25	1.29	.70	HQ32J684K
.82	.25	.72	.32	HQ32D824K	.25	.82	.45	HQ32E824K	.25	1.24	.57	HQ32G824K	.25	1.40	.70	HQ32J824K
1.0	.25	.78	.32	HQ32D105K	.25	.89	.45	HQ32E105K	.25	1.18	.70	HQ32G105K	.25	1.38	.82	HQ32J105K
1.2	.25	.84	.32	HQ32D125K	.25	.95	.45	HQ32E125K	.25	1.29	.70	HQ32G125K	.25	1.51	.82	HQ32J125K
1.5	.25	.70	.45	HQ32D155K	.25	1.06	.45	HQ32E155K	.25	1.43	.70	HQ32G155K	.25	1.68	.82	HQ32J155K
2.0	.25	.76	.45	HQ32D205K	.25	.99	.57	HQ32E205K	.25	1.46	.82	HQ32G205K	.25	1.63	1.07	HQ32J205K
3.0	.25	.90	.45	HQ32D305K	.25	1.18	.57	HQ32E305K	.25	1.51	1.07	HQ32G305K	.25	1.99	1.07	HQ32J305K
<b>Phenolic Tube Core</b>				<b>.500" I.D. x .625" O.D.</b>				<b>CORE CODE 5</b>								
1.0	.50	1.09	.32	HQ35D105K	.50	1.10	.45	HQ35E105K	.50	1.49	.57	HQ35G105K	.50	1.67	.70	HQ35J105K
1.2	.50	1.09	.32	HQ35D125K	.50	1.20	.45	HQ35E125K	.50	1.60	.57	HQ35G125K	.50	1.79	.70	HQ35J125K
1.5	.50	1.12	.32	HQ35D155K	.50	1.22	.45	HQ35E155K	.50	1.55	.70	HQ35G155K	.50	1.78	.82	HQ35J155K
2.0	.50	1.21	.32	HQ35D205K	.50	1.35	.45	HQ35E205K	.50	1.75	.70	HQ35G205K	.50	2.02	.82	HQ35J205K
3.0	.50	1.09	.45	HQ35D305K	.50	1.33	.57	HQ35E305K	.50	1.87	.82	HQ35G305K	.50	2.08	1.07	HQ35J305K
4.0	.50	1.18	.45	HQ35D405K	.50	1.49	.57	HQ35E405K	.50	1.84	1.07	HQ35G405K	.50	2.37	1.07	HQ35J405K
5.0	.50	1.28	.45	HQ35D505K	.50	1.63	.57	HQ35E505K	.50	2.02	1.07	HQ35G505K	.50	2.13	1.57	HQ35J505K
6.0	.50	1.36	.45	HQ35D605K	.50	1.55	.70	HQ35E605K	.50	2.20	1.07	HQ35G605K	.50	2.31	1.57	HQ35J605K
8.0	.50	1.30	.57	HQ35D805K	.50	1.75	.70	HQ35E805K	.50	2.50	1.07	HQ35G805K	.50	2.63	1.57	HQ35J805K
10.0	.50	1.40	.57	HQ35D106K	.50	1.75	.82	HQ35E106K	.50	2.24	1.57	HQ35G106K	.50	2.92	1.57	HQ35J106K

Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches. All +.05" dimension tolerances are Maximum.

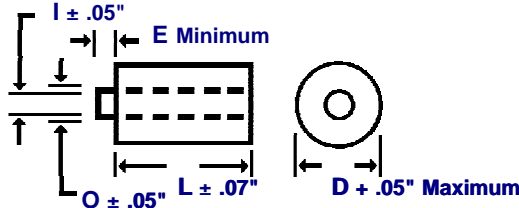
# METALLIZED POLYCARBONATE FEED THROUGH, CAPACITORS, SKIN TIGHT PLASTIC WRAP, WITH SOLDERABLE ENDS



## HQ3

METALLIZED POLYCARBONATE  
FEED THROUGH, ROUND  
REGULAR SERIES

**DIMENSIONS** See tables for specific I, O, E, D, L values.



**CORE INFORMATION**

CORE TYPE	P/N CODE	CORE (E) EXTENSION	CORE SIZE	
			I. D. (I)	O. D. (O)
Teflon Tube	1	.125" Minimum	.120"	0.130"
Kraft Paper	2	.187" Minimum	.250"	0.315"
Kraft Paper	3	.187" Minimum	.375"	0.440"
Phenolic Tube	4	.187" Minimum	.375"	0.500"
Phenolic Tube	5	.187" Minimum	.500"	0.625"
Phenolic Tube	6	.187" Minimum	.625"	0.750"
Phenolic Tube	7	.187" Minimum	.750"	1.062"

**SELECTION AND ORDERING TABLES** Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	800VDC 400VAC				1000VDC 480VAC				1500VDC 750VAC				
	RATING	I	D	L	PART #	I	D	L	PART #	I	D	L	PART #
	± .05"	+ .05"	± .07"			± .05"	+ .05"	± .07"		± .05"	+ .05"	± .07"	
<b>Teflon Tube Core .120" I.D. x .130" O.D. CORE CODE 1</b>													
.01	.12	.46	.57	HQ31L103K	.12	.47	.82	HQ31M103K	.12	.47	.82	HQ31P103K	
.015	.12	.47	.57	HQ31L153K	.12	.48	.82	HQ31M153K	.12	.58	.82	HQ31P153K	
.027	.12	.48	.57	HQ31L273K	.12	.48	.82	HQ31M273K	.12	.75	.82	HQ31P273K	
.033	.12	.53	.57	HQ31L333K	.12	.53	.82	HQ31M333K	.12	.82	.82	HQ31P333K	
.047	.12	.62	.57	HQ31L473K	.12	.61	.82	HQ31M473K	.12	.98	.82	HQ31P473K	
.056	.12	.68	.57	HQ31L563K	.12	.67	.82	HQ31M563K	.12	1.06	.82	HQ31P563K	
.068	.12	.75	.57	HQ31L683K	.12	.72	.82	HQ31M683K	.12	1.16	.82	HQ31P683K	
.082	.12	.82	.57	HQ31L823K	.12	.79	.82	HQ31M823K	.12	1.28	.82	HQ31P823K	
.10	.12	.90	.57	HQ31L104K	.12	.87	.82	HQ31M104K	.12	1.41	.82	HQ31P104K	
.15	.12	1.09	.57	HQ31L154K	.12	1.07	.82	HQ31M154K	.12	1.18	1.20	HQ31P154K	
.22	.12	.91	.82	HQ31L224K	.12	1.29	.82	HQ31M224K	.12	1.44	1.20	HQ31P224K	
.27	.12	1.00	.82	HQ31L274K	.12	1.00	1.20	HQ31M274K	.12	1.59	1.20	HQ31P274K	
.33	.12	1.10	.82	HQ31L334K	.12	1.08	1.20	HQ31M334K	.12	1.75	1.20	HQ31P334K	
.47	.12	1.31	.82	HQ31L474K	.12	1.29	1.20	HQ31M474K	.12	1.69	1.57	HQ31P474K	
.56	.12	1.44	.82	HQ31L564K	.12	1.40	1.20	HQ31M564K	.12	1.84	1.57	HQ31P564K	
.68	.12	1.28	1.07	HQ31L684K	.12	1.55	1.20	HQ31M684K	.12	2.02	1.57	HQ31P684K	
.82	.12	1.40	1.07	HQ31L824K	.12	1.70	1.20	HQ31M824K	.12	2.22	1.57	HQ31P824K	
1.0	.12	1.55	1.07	HQ31L105K	.12	1.87	1.20	HQ31M105K	.12	2.46	1.57	HQ31P105K	
1.5	.12	1.90	1.07	HQ31L155K	.12	1.85	1.57	HQ31M155K	.12	2.31	2.32	HQ31P155K	
2.0	.12	1.89	1.32	HQ31L205K	.12	2.14	1.57	HQ31M205K	.12	2.67	2.32	HQ31P205K	
<b>Paper Tube Core .250" I.D. x .315" O.D. CORE CODE 2</b>													
.10	.25	.95	.57	HQ32L104K	.25	.93	.82	HQ32M104K	.25	1.45	.82	HQ32P104K	
.12	.25	1.02	.57	HQ32L124K	.25	1.01	.82	HQ32M124K	.25	1.58	.82	HQ32P124K	
.15	.25	1.14	.57	HQ32L154K	.25	1.12	.82	HQ32M154K	.25	1.23	1.20	HQ32P154K	
.18	.25	1.23	.57	HQ32L184K	.25	1.21	.82	HQ32M184K	.25	1.33	1.20	HQ32P184K	
.22	.25	1.00	.82	HQ32L224K	.25	1.32	.82	HQ32M224K	.25	1.46	1.20	HQ32P224K	
.27	.25	1.06	.82	HQ32L274K	.25	1.46	.82	HQ32M274K	.25	1.61	1.20	HQ32P274K	
.33	.25	1.15	.82	HQ32L334K	.25	1.13	1.20	HQ32M334K	.25	1.78	1.20	HQ32P334K	
.47	.25	1.36	.82	HQ32L474K	.25	1.32	1.20	HQ32M474K	.25	2.10	1.20	HQ32P474K	
.56	.25	1.47	.82	HQ32L564K	.25	1.44	1.20	HQ32M564K	.25	2.30	1.20	HQ32P564K	
.68	.25	1.61	.82	HQ32L684K	.25	1.58	1.20	HQ32M684K	.25	2.05	1.57	HQ32P684K	
.82	.25	1.44	1.07	HQ32L824K	.25	1.73	1.20	HQ32M824K	.25	2.24	1.57	HQ32P824K	
1.0	.25	1.58	1.07	HQ32L105K	.25	1.90	1.20	HQ32M105K	.25	2.47	1.57	HQ32P105K	
1.2	.25	1.73	1.07	HQ32L125K	.25	2.07	1.20	HQ32M125K	.25	2.71	1.57	HQ32P125K	
1.5	.25	1.92	1.07	HQ32L155K	.25	1.89	1.57	HQ32M155K	.25	3.02	1.57	HQ32P155K	
2.0	.25	2.21	1.07	HQ32L205K	.25	2.16	1.57	HQ32M205K	.25	2.69	2.32	HQ32P205K	
3.0	.25	2.32	1.32	HQ32L305K	.25	2.63	1.57	HQ32M305K	.25	3.28	2.32	HQ32P305K	
<b>Phenolic Tube Core .500" I.D. x .625" O.D. CORE CODE 5</b>													
.10	.50	1.27	.57	HQ35L104K	.50	1.29	.82	HQ35M104K	.50	1.58	.82	HQ35P104K	
.25	.50	1.56	.57	HQ35L254K	.50	1.58	.82	HQ35M254K	.50	1.68	1.20	HQ35P254K	
.50	.50	1.53	.82	HQ35L504K	.50	1.51	1.20	HQ35M504K	.50	2.25	1.20	HQ35P504K	
.75	.50	1.79	.82	HQ35L754K	.50	1.77	1.20	HQ35M754K	.50	2.73	1.20	HQ35P754K	
1.0	.50	2.04	.82	HQ35L105K	.50	2.00	1.20	HQ35M105K	.50	2.55	1.57	HQ35P105K	
1.2	.50	1.83	1.07	HQ35L125K	.50	2.16	1.20	HQ35M125K	.50	2.78	1.57	HQ35P125K	
1.5	.50	2.01	1.07	HQ35L155K	.50	2.39	1.20	HQ35M155K	.50	3.08	1.57	HQ35P155K	
2.0	.50	2.29	1.07	HQ35L205K	.50	2.25	1.57	HQ35M205K	.50	2.76	2.32	HQ35P205K	
3.0	.50	2.40	1.32	HQ35L305K	.50	2.71	1.57	HQ35M305K	.50	3.34	2.32	HQ35P305K	
4.0	.50	2.75	1.32	HQ35L405K	.50	3.11	1.57	HQ35M405K	.50	3.84	2.32	HQ35P405K	

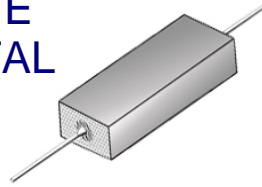
**TOLERANCE TABLE**

Code	Tolerance
A	= ± 0.1% ♦
B	= ± 0.25% ♦
D	= ± 0.5% ♦
F	= ± 1% ♦
G	= ± 2% ♦
H	= ± 3% ♦
J	= ± 5%
K	= ± 10%
M	= ± 20%
N	= ± 30%
P	= GMV
S	= -10% +30%
T	= -10% +50%
V	= -10% +20%
X	= Special

♦ Temperature Stabilized

Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches. All +.05" dimension tolerances are Maximum.

# METALLIZED POLYCARBONATE HERMETICALLY SEALED, METAL CASED, RECTANGULAR CAPACITORS



**HG3**  
METALLIZED POLYCARBONATE  
HERMETIC SEAL, RECTANG.  
REGULAR SERIES

## ORDERING DESCRIPTION

Capacitor, fixed: Metallized Polycarbonate dielectric; extended foil construction; tin-plated copper-clad steel wire axial leads; encased in a hermetically sealed rectangular tin plated brass tube with soldered glass to metal end seals.

## APPLICATION NOTES

Metal encased capacitors are hermetically sealed and meet the moisture resistance, temperature and immersion cycling requirements of MIL-C-18312.

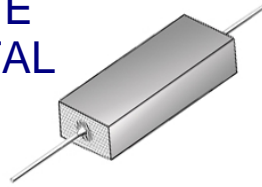
## SELECTION AND ORDERING TABLES Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	35VDC 20VAC				50VDC 40VAC				100VDC 70VAC				200VDC 120VAC			
	T	W	L	PART #	T	W	L	PART #	T	W	L	PART #	T	W	L	PART #
RATING	+ .015" - .005"	+ .015" - .005"	± .031"		+ .015" - .005"	+ .015" - .005"	± .031"		+ .015" - .005"	+ .015" - .005"	± .031"		+ .015" - .005"	+ .015" - .005"	± .031"	
.001	.22	.34	.563	HG3S102K	.22	.34	.563	HG3C102K	.22	.34	.563	HG3D102K	.22	.34	.563	HG3E102K
.0015	.22	.34	.563	HG3S152K	.22	.34	.563	HG3C152K	.22	.34	.563	HG3D152K	.22	.34	.563	HG3E152K
.0022	.22	.34	.563	HG3S222K	.22	.34	.563	HG3C222K	.22	.34	.563	HG3D222K	.22	.34	.563	HG3E222K
.0027	.22	.34	.563	HG3S272K	.22	.34	.563	HG3C272K	.22	.34	.563	HG3D272K	.22	.34	.563	HG3E272K
.0033	.22	.34	.563	HG3S332K	.22	.34	.563	HG3C332K	.22	.34	.563	HG3D332K	.22	.34	.563	HG3E332K
.0047	.22	.34	.563	HG3S472K	.22	.34	.563	HG3C472K	.22	.34	.563	HG3D472K	.22	.34	.563	HG3E472K
.0056	.22	.34	.563	HG3S562K	.22	.34	.563	HG3C562K	.22	.34	.563	HG3D562K	.22	.34	.563	HG3E562K
.0068	.22	.34	.563	HG3S682K	.22	.34	.563	HG3C682K	.22	.34	.563	HG3D682K	.22	.34	.563	HG3E682K
.0082	.22	.34	.563	HG3S822K	.22	.34	.563	HG3C822K	.22	.34	.563	HG3D822K	.22	.34	.563	HG3E822K
.01	.22	.34	.563	HG3S103K	.22	.34	.563	HG3C103K	.22	.34	.563	HG3D103K	.22	.34	.563	HG3E103K
.012	.22	.34	.563	HG3S123K	.22	.34	.563	HG3C123K	.22	.34	.563	HG3D123K	.22	.34	.563	HG3E123K
.015	.22	.34	.563	HG3S153K	.22	.34	.563	HG3C153K	.22	.34	.563	HG3D153K	.22	.34	.563	HG3E153K
.018	.22	.34	.563	HG3S183K	.22	.34	.563	HG3C183K	.22	.34	.563	HG3D183K	.22	.34	.688	HG3E183K
.022	.22	.34	.563	HG3S223K	.22	.34	.563	HG3C223K	.22	.34	.563	HG3D223K	.22	.34	.688	HG3E223K
.027	.22	.34	.563	HG3S273K	.22	.34	.563	HG3C273K	.22	.34	.563	HG3D273K	.22	.34	.688	HG3E273K
.033	.22	.34	.563	HG3S333K	.22	.34	.563	HG3C333K	.22	.34	.563	HG3D333K	.22	.34	.688	HG3E333K
.039	.22	.34	.563	HG3S393K	.22	.34	.563	HG3C393K	.22	.34	.563	HG3D393K	.22	.34	.688	HG3E393K
.047	.22	.34	.563	HG3S473K	.22	.34	.563	HG3C473K	.22	.34	.563	HG3D473K	.22	.34	.688	HG3E473K
.056	.22	.34	.563	HG3S563K	.22	.34	.563	HG3C563K	.22	.34	.563	HG3D563K	.22	.34	.688	HG3E563K
.068	.22	.34	.563	HG3S683K	.22	.34	.563	HG3C683K	.22	.34	.563	HG3D683K	.22	.34	.813	HG3E683K
.082	.22	.34	.563	HG3S823K	.22	.34	.563	HG3C823K	.22	.34	.688	HG3D823K	.22	.34	.813	HG3E823K
.10	.22	.34	.563	HG3S104K	.22	.34	.563	HG3C104K	.22	.34	.688	HG3D104K	.22	.34	.938	HG3E104K
.12	.22	.34	.563	HG3S124K	.22	.34	.563	HG3C124K	.22	.34	.688	HG3D124K	.22	.34	.938	HG3E124K
.15	.22	.34	.563	HG3S154K	.22	.34	.625	HG3C154K	.22	.34	.813	HG3D154K	.22	.34	1.125	HG3E154K
.18	.22	.34	.563	HG3S184K	.22	.34	.625	HG3C184K	.22	.34	.813	HG3D184K	.22	.34	1.125	HG3E184K
.22	.22	.34	.563	HG3S224K	.22	.34	.625	HG3C224K	.22	.34	.938	HG3D224K	.31	.41	.938	HG3E224K
.25	.22	.34	.563	HG3S254K	.22	.34	.625	HG3C254K	.22	.34	.938	HG3D254K	.31	.41	.938	HG3E254K
.27	.22	.34	.563	HG3S274K	.22	.34	.625	HG3C274K	.22	.34	.938	HG3D274K	.31	.41	.938	HG3E274K
.33	.22	.34	.563	HG3S334K	.22	.34	.625	HG3C334K	.22	.34	1.125	HG3D334K	.31	.41	1.125	HG3E334K
.39	.22	.34	.563	HG3S394K	.22	.34	.625	HG3C394K	.22	.34	1.125	HG3D394K	.31	.41	1.125	HG3E394K
.47	.22	.34	.563	HG3S474K	.31	.41	.625	HG3C474K	.31	.41	.938	HG3D474K	.40	.57	1.125	HG3E474K
.50	.22	.34	.688	HG3S504K	.31	.41	.625	HG3C504K	.31	.41	.938	HG3D504K	.40	.57	1.125	HG3E504K
.56	.22	.34	.688	HG3S564K	.31	.41	.625	HG3C564K	.31	.41	1.125	HG3D564K	.40	.57	1.125	HG3E564K
.68	.22	.34	.688	HG3S684K	.31	.41	.625	HG3C684K	.31	.41	1.125	HG3D684K	.40	.57	1.125	HG3E684K
.75	.22	.34	.688	HG3S754K	.31	.41	.625	HG3C754K	.31	.41	1.125	HG3D754K	.40	.57	1.125	HG3E754K
.82	.22	.34	.688	HG3S824K	.31	.41	.781	HG3C824K	.31	.41	1.313	HG3D824K	.40	.57	1.313	HG3E824K
1.0	.22	.34	.688	HG3S105K	.31	.41	.781	HG3C105K	.31	.41	1.313	HG3D105K	.40	.57	1.563	HG3E105K
1.2	.22	.34	.688	HG3S125K	.31	.41	.906	HG3C125K	.40	.57	1.125	HG3D125K	.40	.57	1.813	HG3E125K
1.5	.31	.41	.688	HG3S155K	.31	.41	.906	HG3C155K	.40	.57	1.125	HG3D155K	.40	.57	1.813	HG3E155K
1.8	.31	.41	.688	HG3S185K	.40	.57	1.063	HG3C185K	.40	.57	1.313	HG3D185K	.50	.65	1.563	HG3E185K
2.0	.31	.41	.688	HG3S205K	.40	.57	1.063	HG3C205K	.40	.57	1.313	HG3D205K	.50	.65	1.563	HG3E205K
3.0	.31	.41	.813	HG3S305K	.40	.57	1.063	HG3C305K	.40	.57	1.813	HG3D305K	.50	.65	2.313	HG3E305K
4.0	.31	.41	.938	HG3S405K	.50	.65	1.313	HG3C405K	.50	.65	2.063	HG3D405K	.60	.80	2.313	HG3E405K
5.0	.40	.57	.938	HG3S505K	.50	.65	1.313	HG3C505K	.50	.65	2.063	HG3D505K	.60	.80	2.313	HG3E505K
6.0	.40	.57	.938	HG3S605K	.50	.65	1.313	HG3C605K	.60	.80	2.063	HG3D605K	.60	.80	2.063	HG3E605K
8.0	.40	.57	1.125	HG3S805K	.50	.65	1.313	HG3C805K	.60	.80	2.063	HG3D805K	.60	.80	2.063	HG3E805K
10.0	.40	.57	1.125	HG3S106K	.60	.80	1.313	HG3C106K	.60	.80	2.313	HG3D106K	.60	.80	2.313	HG3E106K
12.0	.40	.57	1.313	HG3S126K	.60	.80	1.313	HG3C126K	.60	.80	2.313	HG3D126K	.60	.80	2.313	HG3E126K
15.0	.40	.57	1.313	HG3S156K	.60	.80	1.781	HG3C156K	.60	.80	2.313	HG3D156K	.60	.80	2.313	HG3E156K
18.0	.50	.65	1.313	HG3S186K	.60	.80	1.813	HG3C186K								
20.0	.50	.65	1.313	HG3S206K	.60	.80	1.813	HG3C206K								
30.0	.60	.80	1.313	HG3S306K	.60	.80	1.813	HG3C306K								

Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches.



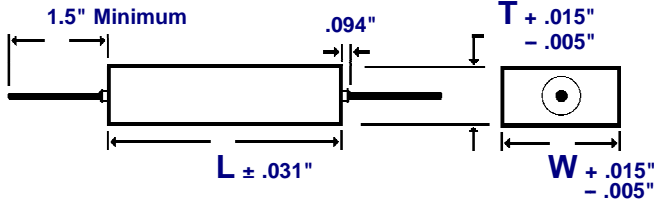
# METALLIZED POLYCARBONATE HERMETICALLY SEALED, METAL CASED, RECTANGULAR CAPACITORS



**HG3**  
METALLIZED POLYCARBONATE  
HERMETIC SEAL, RECTANG.  
REGULAR SERIES

**DIMENSIONS** See tables for specific T, W, L values.

**WIRE SIZE** (Length 1.5" Minimum)



BODY SIZE (T) x (W)	WIRE SIZE	
	AWG No.	Diameter
.22" x .34"	24	0.020"
.31" x .41"	22	0.025"
.40" x .57" & Larger	20	0.032"

**SELECTION AND ORDERING TABLES** Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	400VDC 230VAC				600VDC 275VAC				1000VDC 480VAC				
	RATING	T	W	L	PART #	T	W	L	PART #	T	W	L	PART #
		+ .015" - .005"	+ .015" - .005"	± .031"		+ .015" - .005"	+ .015" - .005"	± .031"		+ .015" - .005"	+ .015" - .005"	± .031"	
.001	.22	.34	.563	HG3G102K	.22	.34	.563	HG3J102K	.22	.34	1.125	HG3M102K	
.0012	.22	.34	.563	HG3G122K	.22	.34	.563	HG3J122K	.22	.34	1.125	HG3M122K	
.0015	.22	.34	.563	HG3G152K	.22	.34	.563	HG3J152K	.22	.34	1.125	HG3M152K	
.0018	.22	.34	.563	HG3G182K	.22	.34	.563	HG3J182K	.22	.34	1.125	HG3M182K	
.0022	.22	.34	.563	HG3G222K	.22	.34	.563	HG3J222K	.22	.34	1.125	HG3M222K	
.0027	.22	.34	.563	HG3G272K	.22	.34	.563	HG3J272K	.22	.34	1.125	HG3M272K	
.0033	.22	.34	.563	HG3G332K	.22	.34	.563	HG3J332K	.22	.34	1.125	HG3M332K	
.0039	.22	.34	.563	HG3G392K	.22	.34	.688	HG3J392K	.22	.34	1.125	HG3M392K	
.0047	.22	.34	.563	HG3G472K	.22	.34	.688	HG3J472K	.22	.34	1.125	HG3M472K	
.0056	.22	.34	.688	HG3G562K	.22	.34	.688	HG3J562K	.22	.34	1.125	HG3M562K	
.0068	.22	.34	.688	HG3G682K	.22	.34	.688	HG3J682K	.22	.34	1.125	HG3M682K	
.0082	.22	.34	.688	HG3G822K	.22	.34	.688	HG3J822K	.31	.41	1.125	HG3M822K	
.01	.22	.34	.688	HG3G103K	.22	.34	.688	HG3J103K	.31	.41	1.125	HG3M103K	
.012	.22	.34	.688	HG3G123K	.22	.34	.813	HG3J123K	.31	.41	1.125	HG3M123K	
.015	.22	.34	.688	HG3G153K	.22	.34	.813	HG3J153K	.31	.41	1.125	HG3M153K	
.018	.22	.34	.813	HG3G183K	.22	.34	.938	HG3J183K	.40	.57	1.125	HG3M183K	
.022	.22	.34	.813	HG3G223K	.22	.34	.938	HG3J223K	.40	.57	1.125	HG3M223K	
.027	.22	.34	.938	HG3G273K	.22	.34	1.125	HG3J273K	.50	.65	1.125	HG3M273K	
.033	.22	.34	.938	HG3G333K	.31	.41	.938	HG3J333K	.50	.65	1.125	HG3M333K	
.039	.22	.34	1.125	HG3G393K	.31	.41	.938	HG3J393K	.50	.65	1.125	HG3M393K	
.047	.22	.34	1.125	HG3G473K	.31	.41	1.125	HG3J473K	.40	.57	1.500	HG3M473K	
.056	.31	.41	.938	HG3G563K	.31	.41	1.125	HG3J563K	.50	.65	1.500	HG3M563K	
.068	.31	.41	1.125	HG3G683K	.31	.41	1.313	HG3J683K	.50	.65	1.500	HG3M683K	
.082	.31	.41	1.125	HG3G823K	.40	.57	1.125	HG3J823K	.50	.65	1.500	HG3M823K	
.10	.31	.41	1.313	HG3G104K	.40	.57	1.125	HG3J104K	.50	.65	1.813	HG3M104K	
.12	.31	.41	1.313	HG3G124K	.40	.57	1.125	HG3J124K	.50	.65	1.813	HG3M124K	
.15	.40	.57	1.125	HG3G154K	.40	.57	1.313	HG3J154K	.60	.80	1.813	HG3M154K	
.18	.40	.57	1.125	HG3G184K	.40	.57	1.563	HG3J184K	.60	.80	1.813	HG3M184K	
.22	.40	.57	1.313	HG3G224K	.40	.57	1.813	HG3J224K	.60	.80	2.625	HG3M224K	
.25	.40	.57	1.313	HG3G254K	.40	.57	1.813	HG3J254K	.60	.80	2.625	HG3M254K	
.27	.40	.57	1.563	HG3G274K	.50	.65	1.563	HG3J274K	.60	.80	2.625	HG3M274K	
.33	.40	.57	1.563	HG3G334K	.50	.65	1.813	HG3J334K	.60	.80	2.625	HG3M334K	
.39	.40	.57	1.813	HG3G394K	.50	.65	2.063	HG3J394K	.60	.80	3.375	HG3M394K	
.47	.50	.65	1.563	HG3G474K	.50	.65	2.313	HG3J474K	.60	.80	3.375	HG3M474K	
.50	.50	.65	1.813	HG3G504K	.50	.65	2.313	HG3J504K	.60	.80	3.375	HG3M504K	
.56	.50	.65	1.813	HG3G564K	.60	.80	2.063	HG3J564K					
.68	.50	.65	2.063	HG3G684K	.60	.80	2.063	HG3J684K					
.75	.50	.65	2.313	HG3G754K	.60	.80	2.313	HG3J754K					
.82	.60	.80	2.063	HG3G824K									
1.0	.60	.80	2.063	HG3G105K									

### TOLERANCE TABLE

Code	Tolerance
A	= ± 0.1% ♦
B	= ± 0.25% ♦
D	= ± 0.5% ♦
F	= ± 1% ♦
G	= ± 2% ♦
H	= ± 3% ♦
J	= ± 5%
K	= ± 10%
M	= ± 20%
N	= ± 30%
P	= GMV
S	= -10% +30%
T	= -10% +50%
V	= -10% +20%
X	= Special

♦ Temperature Stabilized

### HARDWARE

For use with metal tubes. Add the Code number to the end of the Part Number, include the dash ( "-" ).

#### CODE DESCRIPTION

- 1 = Tangential Bracket
- 2 = Threaded Neck Term.
- 3 = Flat Lug Terminal
- 4 = 90° Lug Terminal
- 5 = Insulating Sleeve
- 6 = Stud Mounting

Add .015" to the capacitors dimensions for the Insulating Sleeve.

Codes may be combined. Example:  
- 35 = Flat Lug Terminal with Insulating Sleeve. ( Place lower number first )

Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches.

# METALLIZED POLYCARBONATE HERMETICALLY SEALED, ROUND, METAL CASED CAPACITORS



**HL3**  
METALLIZED POLYCARBONATE  
HERMETIC SEAL, ROUND  
REGULAR SERIES

## ORDERING DESCRIPTION

Capacitor, fixed: Metallized Polycarbonate dielectric; extended foil construction; tin-plated copper-clad steel wire axial leads; encased in a hermetically sealed round tin plated brass tube with soldered glass to metal end seals.

## APPLICATION NOTES

Metal encased capacitors are hermetically sealed and meet the moisture resistance, temperature and immersion cycling requirements of MIL-C-18312.

## SELECTION AND ORDERING TABLES Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	35VDC 20VAC			50VDC 40VAC			100VDC 70VAC			200VDC 120VAC		
	RATING	D	L	PART #	D	L	PART #	D	L	PART #	D	L
	+ .015" - .005"	± .031"		+ .015" - .005"	± .031"		+ .015" - .005"	± .031"		+ .015" - .005"	± .031"	
.001	.195	.531	HL3S102K	.235	.531	HL3C102K	.235	.531	HL3D102K	.235	.531	HL3E102K
.0027	.195	.531	HL3S272K	.235	.531	HL3C272K	.235	.531	HL3D272K	.235	.531	HL3E272K
.0033	.195	.531	HL3S332K	.235	.531	HL3C332K	.235	.531	HL3D332K	.235	.531	HL3E332K
.0056	.195	.531	HL3S562K	.235	.531	HL3C562K	.235	.531	HL3D562K	.235	.531	HL3E562K
.0068	.195	.531	HL3S682K	.235	.531	HL3C682K	.235	.531	HL3D682K	.235	.531	HL3E682K
.0082	.195	.531	HL3S822K	.235	.531	HL3C822K	.235	.531	HL3D822K	.235	.531	HL3E822K
.01	.195	.531	HL3S103K	.235	.531	HL3C103K	.175	.625	HL3D103K	.175	.625	HL3E103K
.012	.195	.531	HL3S123K	.235	.531	HL3C123K	.175	.625	HL3D123K	.175	.625	HL3E123K
.015	.195	.531	HL3S153K	.235	.531	HL3C153K	.175	.625	HL3D153K	.195	.625	HL3E153K
.018	.195	.531	HL3S183K	.235	.531	HL3C183K	.175	.625	HL3D183K	.195	.625	HL3E183K
.022	.195	.531	HL3S223K	.235	.531	HL3C223K	.175	.625	HL3D223K	.235	.625	HL3E223K
.027	.195	.531	HL3S273K	.235	.531	HL3C273K	.175	.625	HL3D273K	.235	.625	HL3E273K
.033	.195	.531	HL3S333K	.235	.531	HL3C333K	.195	.625	HL3D333K	.235	.813	HL3E333K
.039	.195	.531	HL3S393K	.235	.531	HL3C393K	.195	.625	HL3D393K	.235	.813	HL3E393K
.047	.195	.531	HL3S473K	.235	.531	HL3C473K	.235	.625	HL3D473K	.235	.813	HL3E473K
.056	.195	.531	HL3S563K	.235	.531	HL3C563K	.235	.625	HL3D563K	.312	.813	HL3E563K
.068	.195	.531	HL3S683K	.235	.531	HL3C683K	.235	.625	HL3D683K	.312	.813	HL3E683K
.082	.195	.531	HL3S823K	.235	.531	HL3C823K	.235	.813	HL3D823K	.312	.813	HL3E823K
.10	.195	.531	HL3S104K	.235	.531	HL3C104K	.235	.813	HL3D104K	.312	.813	HL3E104K
.12	.195	.531	HL3S124K	.235	.531	HL3C124K	.312	.813	HL3D124K	.312	.938	HL3E124K
.15	.235	.531	HL3S154K	.235	.625	HL3C154K	.312	.813	HL3D154K	.312	.938	HL3E154K
.18	.235	.531	HL3S184K	.235	.625	HL3C184K	.312	.813	HL3D184K	.312	1.125	HL3E184K
.22	.235	.531	HL3S224K	.235	.625	HL3C224K	.312	.813	HL3D224K	.312	1.125	HL3E224K
.25	.235	.531	HL3S254K	.235	.625	HL3C254K	.312	.938	HL3D254K	.400	.938	HL3E254K
.27	.312	.531	HL3S274K	.235	.625	HL3C274K	.312	.938	HL3D274K	.400	.938	HL3E274K
.33	.312	.531	HL3S334K	.312	.625	HL3C334K	.312	.938	HL3D334K	.400	1.125	HL3E334K
.39	.312	.531	HL3S394K	.312	.625	HL3C394K	.312	1.125	HL3D394K	.400	1.125	HL3E394K
.47	.312	.531	HL3S474K	.312	.625	HL3C474K	.312	1.125	HL3D474K	.400	1.313	HL3E474K
.50	.312	.625	HL3S504K	.312	.625	HL3C504K	.400	.938	HL3D504K	.500	1.125	HL3E504K
.56	.312	.625	HL3S564K	.312	.625	HL3C564K	.400	1.125	HL3D564K	.500	1.125	HL3E564K
.68	.312	.625	HL3S684K	.312	.781	HL3C684K	.400	1.125	HL3D684K	.500	1.125	HL3E684K
.75	.312	.625	HL3S754K	.312	.781	HL3C754K	.400	1.125	HL3D754K	.500	1.313	HL3E754K
.82	.312	.625	HL3S824K	.312	.781	HL3C824K	.400	1.313	HL3D824K	.500	1.313	HL3E824K
1.0	.312	.625	HL3S105K	.400	.781	HL3C105K	.400	1.313	HL3D105K	.562	1.313	HL3E105K
1.2	.312	.625	HL3S125K	.400	.781	HL3C125K	.500	1.313	HL3D125K	.562	1.813	HL3E125K
1.5	.400	.625	HL3S155K	.400	.781	HL3C155K	.500	1.313	HL3D155K	.562	1.813	HL3E155K
1.8	.400	.625	HL3S185K	.400	.906	HL3C185K	.562	1.313	HL3D185K	.670	1.813	HL3E185K
2.0	.400	.625	HL3S205K	.400	.906	HL3C205K	.562	1.313	HL3D205K	.670	1.813	HL3E205K
3.0	.400	.813	HL3S305K	.500	.906	HL3C305K	.562	1.813	HL3D305K	.670	1.813	HL3E305K
4.0	.400	.938	HL3S405K	.562	1.063	HL3C405K	.670	1.813	HL3D405K	1.000	1.813	HL3E405K
5.0	.400	.938	HL3S505K	.562	1.063	HL3C505K	.670	1.813	HL3D505K	1.000	1.813	HL3E505K
6.0	.500	.938	HL3S605K	.562	1.313	HL3C605K	.750	2.063	HL3D605K	1.000	2.063	HL3E605K
8.0	.500	1.125	HL3S805K	.562	1.313	HL3C805K	.750	2.063	HL3D805K	1.000	2.063	HL3E805K
10.0	.500	1.125	HL3S106K	.670	1.313	HL3C106K	1.000	1.813	HL3D106K	1.000	2.313	HL3E106K
12.0	.500	1.313	HL3S126K	.670	1.313	HL3C126K	1.000	1.813	HL3D126K	1.000	2.313	HL3E126K
15.0	.562	1.313	HL3S156K	.750	1.313	HL3C156K	1.000	2.063	HL3D156K	1.000	3.313	HL3E156K
20.0	.562	1.313	HL3S206K	.670	1.813	HL3C206K	1.000	2.313	HL3D206K			
30.0	.670	1.313	HL3S306K	.750	1.813	HL3C306K	1.000	2.313	HL3D306K			
40.0	.750	1.313	HL3S406K	1.000	1.813	HL3C406K						
50.0	1.000	1.313	HL3S506K	1.000	1.813	HL3C506K						
75.0	1.000	1.625	HL3S756K	1.000	1.813	HL3C756K						
100.0	1.000	1.625	HL3S107K									

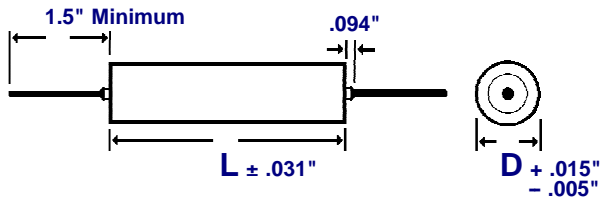
Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches.

# METALLIZED POLYCARBONATE HERMETICALLY SEALED, ROUND, METAL CASED CAPACITORS



**HL3**  
METALLIZED POLYCARBONATE  
HERMETIC SEAL, ROUND  
REGULAR SERIES

**DIMENSIONS** See tables for specific D, L values.



**WIRE SIZE** (Length 1.5" Minimum)

BODY DIAMETER (D)	WIRE SIZE	
	AWG No.	Diameter
.175" & .195"	24	0.020"
.235" & .312"	22	0.025"
.400" & Larger	20	0.032"

**SELECTION AND ORDERING TABLES** Select voltage rating, capacitance and tolerance, read Part Number to the right.

MFD	400VDC 230VAC			600VDC 275VAC			1000VDC 480VAC			
	RATING	D	L	PART #	D	L	PART #	D	L	PART #
		+ .015" - .005"	± .031"		+ .015" - .005"	± .031"		+ .015" - .005"	± .031"	
.001	.235	.531	HL3G102K	.235	.531	HL3J102K	.312	1.125	HL3M102K	
.0012	.235	.531	HL3G122K	.235	.531	HL3J122K	.312	1.125	HL3M122K	
.0015	.235	.531	HL3G152K	.235	.531	HL3J152K	.312	1.125	HL3M152K	
.0018	.235	.531	HL3G182K	.235	.531	HL3J182K	.312	1.125	HL3M182K	
.0022	.235	.531	HL3G222K	.235	.531	HL3J222K	.312	1.125	HL3M222K	
.0027	.235	.531	HL3G272K	.235	.531	HL3J272K	.312	1.125	HL3M272K	
.0033	.235	.531	HL3G332K	.235	.531	HL3J332K	.312	1.125	HL3M332K	
.0039	.235	.531	HL3G392K	.312	.625	HL3J392K	.312	1.125	HL3M392K	
.0047	.235	.531	HL3G472K	.312	.625	HL3J472K	.312	1.125	HL3M472K	
.0056	.235	.625	HL3G562K	.312	.625	HL3J562K	.312	1.125	HL3M562K	
.0068	.235	.625	HL3G682K	.312	.625	HL3J682K	.312	1.125	HL3M682K	
.0082	.235	.625	HL3G822K	.312	.625	HL3J822K	.312	1.125	HL3M822K	
.01	.235	.813	HL3G103K	.312	.813	HL3J103K	.400	1.125	HL3M103K	
.012	.235	.813	HL3G123K	.312	.813	HL3J123K	.400	1.125	HL3M123K	
.015	.312	.813	HL3G153K	.312	.813	HL3J153K	.400	1.125	HL3M153K	
.018	.312	.813	HL3G183K	.312	.813	HL3J183K	.500	1.125	HL3M183K	
.022	.312	.813	HL3G223K	.312	.938	HL3J223K	.500	1.125	HL3M223K	
.027	.312	.813	HL3G273K	.312	1.125	HL3J273K	.500	1.125	HL3M273K	
.033	.312	.938	HL3G333K	.312	1.125	HL3J333K	.562	1.125	HL3M333K	
.039	.312	.938	HL3G393K	.400	.938	HL3J393K	.562	1.125	HL3M393K	
.047	.312	1.125	HL3G473K	.400	.938	HL3J473K	.670	1.125	HL3M473K	
.056	.400	.938	HL3G563K	.400	1.125	HL3J563K	.562	1.500	HL3M563K	
.068	.400	.938	HL3G683K	.400	1.125	HL3J683K	.562	1.500	HL3M683K	
.082	.400	1.125	HL3G823K	.500	1.125	HL3J823K	.670	1.500	HL3M823K	
.10	.400	1.125	HL3G104K	.500	1.125	HL3J104K	.670	1.500	HL3M104K	
.12	.500	1.125	HL3G124K	.500	1.125	HL3J124K	.750	1.500	HL3M124K	
.15	.500	1.125	HL3G154K	.500	1.313	HL3J154K	1.000	1.500	HL3M154K	
.18	.500	1.125	HL3G184K	.562	1.313	HL3J184K	1.000	1.500	HL3M184K	
.22	.500	1.313	HL3G224K	.562	1.813	HL3J224K	1.000	1.875	HL3M224K	
.25	.562	1.313	HL3G254K	.562	1.813	HL3J254K	1.000	1.875	HL3M254K	
.27	.562	1.313	HL3G274K	.562	1.813	HL3J274K	1.000	1.875	HL3M274K	
.33	.562	1.813	HL3G334K	.670	1.813	HL3J334K	1.000	1.875	HL3M334K	
.39	.562	1.813	HL3G394K	.670	1.813	HL3J394K	1.000	1.875	HL3M394K	
.47	.562	1.813	HL3G474K	.750	1.813	HL3J474K	1.000	2.625	HL3M474K	
.50	.670	1.813	HL3G504K	.750	1.813	HL3J504K	1.000	2.625	HL3M504K	
.56	.670	1.813	HL3G564K	.750	1.813	HL3J564K	1.000	2.625	HL3M564K	
.68	.670	1.813	HL3G684K	.750	2.063	HL3J684K	1.000	2.625	HL3M684K	
.75	.750	2.063	HL3G754K	1.000	1.813	HL3J754K	1.000	2.625	HL3M754K	
.82	.750	2.063	HL3G824K	1.000	1.813	HL3J824K	1.000	3.375	HL3M824K	
1.0	.750	2.063	HL3G105K	1.000	1.813	HL3J105K	1.000	3.375	HL3M105K	
1.2	1.000	1.813	HL3G125K	1.000	2.313	HL3J125K				
1.5	1.000	1.813	HL3G155K	1.000	2.313	HL3J155K				
1.8	1.000	2.063	HL3G185K							
2.0	1.000	2.063	HL3G205K							

## TOLERANCE TABLE

Code	Tolerance
A	= ± 0.1% ♦
B	= ± 0.25% ♦
D	= ± 0.5% ♦
F	= ± 1% ♦
G	= ± 2% ♦
H	= ± 3% ♦
J	= ± 5%
K	= ± 10%
M	= ± 20%
N	= ± 30%
P	= GMV
S	= -10% +30%
T	= -10% +50%
V	= -10% +20%
X	= Special

♦ Temperature Stabilized

## HARDWARE

For use with metal tubes. Add the Code number to the end of the Part Number, include the dash ( "-" ).

### CODE DESCRIPTION

- 1 = Tangential Bracket
- 2 = Threaded Neck Term.
- 3 = Flat Lug Terminal
- 4 = 90° Lug Terminal
- 5 = Insulating Sleeve
- 6 = Stud Mounting

Add .015" to the capacitors dimensions for the Insulating Sleeve.

Codes may be combined. Example:  
- 35 = Flat Lug Terminal with Insulating Sleeve. ( Place lower number first )

Note: Replace the last digit **K** with the desired tolerance code from the tolerance table. For an in-between value use the next larger value's dimensions. Custom sizes are readily available. All dimensions are in inches.

# METALLIZED POLYCARBONATE CAPACITORS PARAMETRIC TREND CURVES AND ACCEPTANCE CRITERIA

SERIES



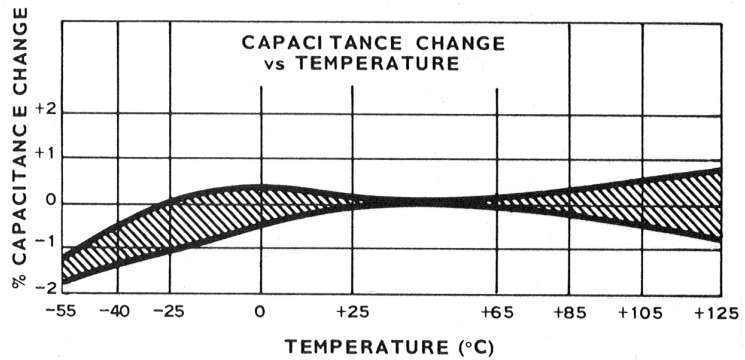
## CAPACITANCE

Reference MIL-STD-202, Method 305  
Test Frequency: 1000 Hz  
Temperature: +25°C

Capacitance Change Over  
Temperature.

Acceptance Limits:

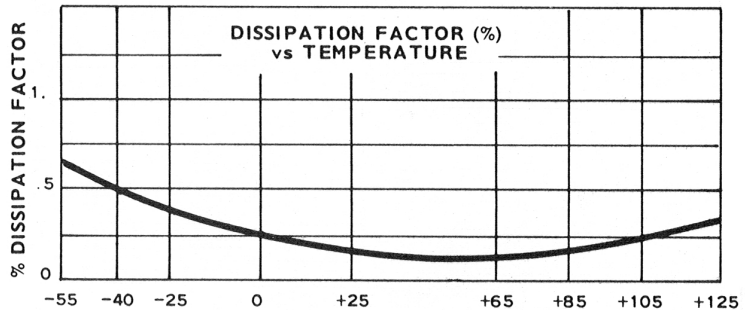
- @ -55°C = -2% Maximum Change
- @ +85°C = ±1% Maximum Change
- @ +125°C = ±2% Maximum Change



## DISSIPATION FACTOR

Reference MIL-STD-202,  
Method 306  
Test Frequency: 1000 Hz  
Temperature: +25°C

Acceptance Limit: 0.30% Maximum

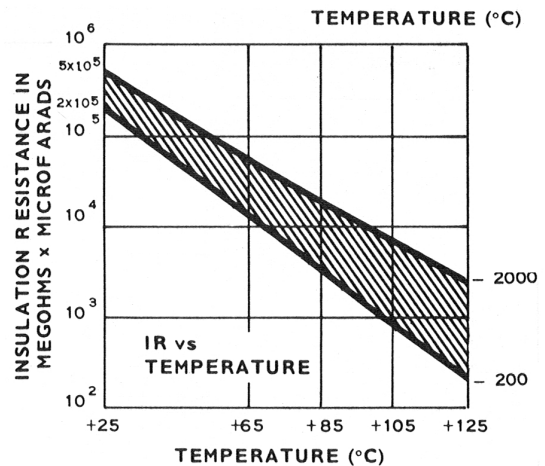


## INSULATION RESISTANCE

Reference MIL-STD-202, Method 302  
Electrification shall be at rated voltage  
or 500 VDC, whichever is less and for  
a time not greater than 2 minutes.

Acceptance Limits:

Test Temperature	Megs x $\mu$ f Minimum	Megohms Need not exceed
@ +25°C	100,000	200,000
@ +85°C	1,000	20,000
@ +125°C	100	2,000



## VOLTAGE RATING

100% of listed voltage rating from -55°C to +125°C,

## VOLTAGE TEST

Reference MIL-STD-202, Method 301. Surge current is limited to 1 ampere maximum. Voltage applied for 1 minute (maximum) @ +25°C. Ground test is performed terminal to case (where the case is not a terminal) at 200% of the DC voltage rating. Dielectric strength test is performed terminal to terminal at 200% of the DC voltage rating.