



**CONFORMALLY COATED RADIAL LEADED TEMPERATURE COEFFICIENTS**

NPO, X7R, Z5U.  
50V, 100V (200V available upon request).

**CASE MATERIAL**

Epoxy (Flame Retardant to UL Bulletin 492, Par. 280).

**LEAD MATERIAL**

Solderable.

**LEADS**

Trimmed Leads, 0.230" ± 0.03".  
Long Leads, 1.25" minimum.

**CAPACITANCE TOLERANCES**

NPO: C = ±0.25pF, D = ±0.5pF, F = ±1.0% (>50pF only), G = ±2.0% (>25pF only), J = ±5%, K = ±10%.

X7R: J = ±5%, K = ±10%, M = ±20%.

Z5U: M = ±20%, Z = +80%, -20%.

Tolerance Codes F and G are not available in case 15.  
TL = Trimmed Leads.

**PART NUMBERING**

Part Number Example: CMR-050/104KX20TF

<b>CMR</b>	-	<b>050</b>	/	<b>104</b>	<b>K</b>	<b>X</b>	<b>20</b>	<b>T</b>	<b>F</b>
Type		Rated DC Voltage		Capacitance Code (pF)*	Tolerance Code	Dielectric Material**	Case Size	Package Code***	RoHs Compliant

\* Capacitance Code: First two digits represent significant figures, third digit represents multiplier (number of zeros).  
\*\* Dielectric Material: N = NPO, X = X7R, Z = Z5U.  
\*\*\* Package Code: TR = Tape & Reel, TA = Tape & Ammo, B = Bulk.

**CAPACITANCE RANGE / EIA VALUE (pF)**

EIA/TC	WVDC	Case							
		15	20	21	22	27	30	40	50
NPO	500		1R0-182	1R0-182	1R0-182	1R0-182	152-722	682-153	363
	200	1R0-221	331-222	1R0-222	1R0-222	1R0-222			
	100	101-681	102-682	331-682	331-682	331-682	822-223	333-473	103-683
X7R	50	331-102	152-822	102-822	102-822	102-682	103-333	393-683	103-104
	500		102-333	102-333	102-333	102-333	223-124	104-274	104-594
	200	471-332	471-333				471-224	471-394	471-394
	100	471-103	153-104	102-104	102-104	102-104	154-474	105	334-225
Z5U	50	471-223	333-224	102-224	102-224	102-224	334-105	225-275	105-475
	100	103	473-224	103-224	103-224	103-224	334-105	155-225	105-225
	50	103-473	104-105	103-105	103-105	103-105	684-335		105-475

**LEAD STYLES**

Case	15	20	21	22	27	30	40	50
Max Width (W)	0.150 (3.81)	0.200 (5.08)	0.200 (5.08)	0.200 (5.08)	0.260 (6.604)	0.300 (7.62)	0.400 (10.16)	0.500 (12.70)
Max Height (H)	0.150 (3.81)	0.200 (5.08)	0.200 (5.08)	0.200 (5.08)	0.250 (6.35)	0.300 (7.62)	0.400 (10.16)	0.500 (12.70)
Max Thickness (T)	0.100 (2.54)	0.125 (3.175)	0.125 (3.175)	0.125 (3.125)	0.160 (4.06)	0.150 (3.81)	0.150 (3.81)	0.200 (5.08)
Lead Spacing (L.S.)	0.100 (2.54)	0.100 (2.54)	0.200 (5.08)	0.250 (6.35)	0.300 (7.62)	0.200 (5.08)	0.200 (5.08)	0.400 (10.16)
Lead Diameter (L. D.)	0.020 (0.508)	0.020 (0.508)	0.020 (0.508)	0.020 (0.508)	0.020 (0.508)	0.020 (0.508)	0.020 (0.508)	0.025 (0.635)

Other lead styles available upon request.

**PACKAGE**

	1000	1000	1000	1000	1000	1000	1000	1000
Bulk								
T/R 14"	3500	3000	3000	3000	N/A	N/A	2000	2000
T/A	3500	3000	3000	3000	N/A	N/A	2000	2000