

Type: **POD** - Radial leaded, epoxy coated, film/foil polypropylene capacitor

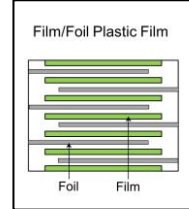


Typical Applications:

- High frequency pulse
- Noise suppression
- Filtering

Attributes:

- Low dissipation factor (DF)
- High reliability
- Self-Healing
- High insulation resistance (IR)
- High dv/dt
- Flame Retardant Coating



Specifications

Construction: Polypropylene dielectric.
Wound, extended foil construction.
Electrode: Foil.

Enclosure: UL 94 V-0 flame retardant epoxy dipped coating.

Lead Wire: Copper-clad steel core wire electroplated with 100% Tin.

Capacitance: 0.0010 to 0.47 μF $\pm 5\%$ (J), $\pm 10\%$ (K) & $\pm 20\%$ (M)

Rated Voltage: 100, 250, 400, 630 and 1000 VDC

DF: $\leq 0.1\%$ @ 20°C $\pm 3^\circ\text{C}$, 1KHz

I.R.: C < 0.33 μF , R $\geq 30,000$ MegOhms @ 20 $\pm 3^\circ\text{C}$
C $\geq 0.33\mu\text{F}$, RC $\geq 10,000$ MegOhms x μF s

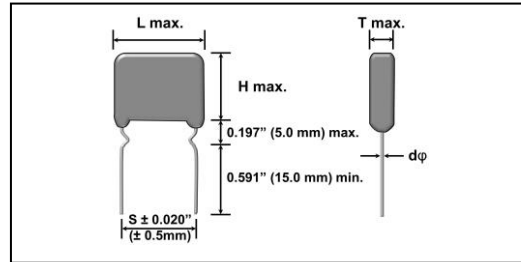
Dielectric Strength: 1.6 x rated VDC for 2 seconds max.

Temp Range: -40°C to 105°C, derate voltage 1.5% / °C above 85°C

T.C.: -220 ± 110 ppm / °C, -40°C to +85°C

Marking: Type, Logo, capacitance code, tolerance code and working voltage.

Packaging: Bulk, Ammo or Reel packed.



Dimensions in Inches (mm)						
L	0.512 (13.0)	0.749 (19.0)	0.945 (24.0)	1.221 (31.0)	1.378 (35.0)	1.575 (40.0)
S	0.394 (10.0)	0.591 (15.0)	0.788 (20.0)	1.083 (27.5)	1.182 (30.0)	1.378 (35.0)
d ϕ	0.024 (0.6)	0.032 (0.8)	0.032 (0.8)	0.032 (0.8)	0.032 (0.8)	0.032 (0.8)

VDC	Maximum Pulse Rise Time (dv/dt) V/ μSec					
	S Dimension in Inches (mm)					
100	4,500	2,100	1,100	600		
250	5,000	3,000	1,400	900		
400	14,400	7,200	3,000	2,100		600
630	15,000	7,400	4,000	3,000		
1000	15,000	9,000	5,000	3,700	3,500	

Accelerated Performance Testing

DC Life: 1,000 Hours, 85°C, 1.25 x Rated VDC
Limits: Δ C/C $\leq 3\%$, DF $\leq 0.12\%$,
IR $\geq 50\%$ of initial limit

Moisture: 40°C / 95% RH / 240 hours
Limits: Δ C/C $< 3\%$, DF $\leq 0.12\%$,
IR $\geq 50\%$ of initial limit

Vibration: IEC 60068-2-21

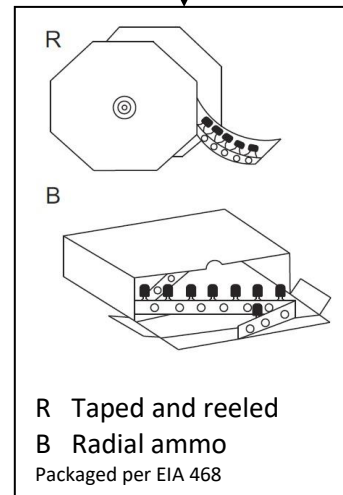
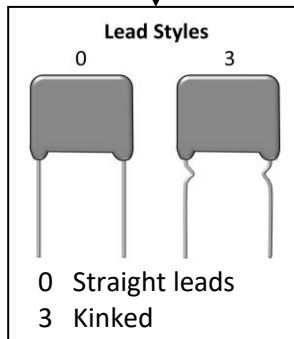
μF	100 VDC				250 VDC				400 VDC			
	L	T	H	S	L	T	H	S	L	T	H	S
0.0010	0.512 (13.0)	0.237 (06.0)	0.355 (09.0)	0.394 (10.0)	0.512 (13.0)	0.237 (06.0)	0.355 (09.0)	0.394 (10.0)	0.512 (13.0)	0.237 (06.0)	0.237 (06.0)	0.394 (10.0)
0.0022	0.512 (13.0)	0.237 (06.0)	0.355 (09.0)	0.394 (10.0)	0.512 (13.0)	0.237 (06.0)	0.355 (09.0)	0.394 (10.0)	0.512 (13.0)	0.237 (06.0)	0.237 (06.0)	0.394 (10.0)
0.0033	0.512 (13.0)	0.237 (06.0)	0.375 (09.5)	0.394 (10.0)	0.512 (13.0)	0.256 (06.5)	0.375 (09.5)	0.394 (10.0)	0.512 (13.0)	0.276 (07.0)	0.276 (07.0)	0.394 (10.0)
0.0047	0.512 (13.0)	0.256 (06.5)	0.375 (09.5)	0.394 (10.0)	0.512 (13.0)	0.276 (07.0)	0.394 (10.0)	0.394 (10.0)	0.512 (13.0)	0.296 (07.5)	0.296 (07.5)	0.394 (10.0)
0.0068	0.512 (13.0)	0.276 (07.0)	0.394 (10.0)	0.394 (10.0)	0.512 (13.0)	0.296 (07.5)	0.414 (10.5)	0.394 (10.0)	0.512 (13.0)	0.315 (08.0)	0.315 (08.0)	0.394 (10.0)
0.0100	0.512 (13.0)	0.296 (07.5)	0.414 (10.5)	0.394 (10.0)	0.512 (13.0)	0.296 (07.5)	0.434 (11.0)	0.394 (10.0)	0.512 (13.0)	0.335 (08.5)	0.335 (08.5)	0.394 (10.0)
0.0220	0.512 (13.0)	0.315 (08.0)	0.434 (11.0)	0.394 (10.0)	0.512 (13.0)	0.335 (08.5)	0.473 (12.0)	0.394 (10.0)	0.749 (19.0)	0.335 (08.5)	0.335 (08.5)	0.591 (15.0)
0.0330	0.749 (19.0)	0.315 (08.0)	0.473 (12.0)	0.591 (15.0)	0.749 (19.0)	0.335 (08.5)	0.512 (13.0)	0.591 (15.0)	0.749 (19.0)	0.355 (09.0)	0.355 (09.0)	0.591 (15.0)
0.0470	0.749 (19.0)	0.335 (08.5)	0.512 (13.0)	0.591 (15.0)	0.749 (19.0)	0.355 (09.0)	0.532 (13.5)	0.591 (15.0)	0.945 (24.0)	0.394 (10.0)	0.394 (10.0)	0.788 (20.0)
0.0680	0.749 (19.0)	0.375 (09.5)	0.591 (15.0)	0.591 (15.0)	0.749 (19.0)	0.394 (10.0)	0.611 (15.5)	0.591 (15.0)	0.945 (24.0)	0.434 (11.0)	0.434 (11.0)	0.788 (20.0)
0.1000	0.945 (24.0)	0.434 (11.0)	0.670 (17.0)	0.788 (20.0)	0.945 (24.0)	0.493 (12.5)	0.709 (18.0)	0.788 (20.0)	1.221 (31.0)	0.473 (12.0)	0.473 (12.0)	1.083 (27.5)
0.2200	0.945 (24.0)	0.512 (13.0)	0.749 (19.0)	0.788 (20.0)	0.945 (24.0)	0.571 (14.5)	0.788 (20.0)	0.788 (20.0)	1.221 (31.0)	0.591 (15.0)	0.591 (15.0)	1.083 (27.5)
0.3300	1.221 (31.0)	0.552 (14.0)	0.827 (21.0)	1.083 (27.5)	1.221 (31.0)	0.591 (15.0)	0.867 (22.0)	1.083 (27.5)	1.575 (40.0)	0.611 (15.5)	0.611 (15.5)	1.378 (35.0)
0.4700	1.221 (31.0)	0.630 (16.0)	0.906 (23.0)	1.083 (27.5)	1.221 (31.0)	0.670 (17.0)	0.945 (24.0)	1.083 (27.5)	1.575 (40.0)	0.689 (17.5)	0.689 (17.5)	1.378 (35.0)

μF	630 VDC				1000 VDC			
	L	T	H	S	L	T	H	S
0.0010	0.512 (13.0)	0.237 (06.0)	0.394 (10.0)	0.394 (10.0)	0.512 (13.0)	0.296 (07.5)	0.473 (12.0)	0.394 (10.0)
0.0022	0.512 (13.0)	0.276 (07.0)	0.394 (10.0)	0.394 (10.0)	0.512 (13.0)	0.335 (08.5)	0.532 (13.5)	0.394 (10.0)
0.0033	0.512 (13.0)	0.296 (07.5)	0.453 (11.5)	0.394 (10.0)	0.749 (19.0)	0.335 (08.5)	0.532 (13.5)	0.591 (15.0)
0.0047	0.512 (13.0)	0.315 (08.0)	0.493 (12.5)	0.394 (10.0)	0.749 (19.0)	0.375 (09.5)	0.552 (14.0)	0.591 (15.0)
0.0068	0.512 (13.0)	0.355 (09.0)	0.552 (14.0)	0.394 (10.0)	0.749 (19.0)	0.414 (10.5)	0.630 (16.0)	0.591 (15.0)
0.0100	0.749 (19.0)	0.355 (09.0)	0.552 (14.0)	0.591 (15.0)	0.945 (24.0)	0.394 (10.0)	0.630 (16.0)	0.788 (20.0)
0.0220	0.749 (19.0)	0.453 (11.5)	0.670 (17.0)	0.591 (15.0)	0.945 (24.0)	0.473 (12.0)	0.729 (18.5)	0.788 (20.0)
0.0330	0.945 (24.0)	0.434 (11.0)	0.670 (17.0)	0.788 (20.0)	1.221 (31.0)	0.493 (12.5)	0.749 (19.0)	1.083 (27.5)
0.0470	0.945 (24.0)	0.473 (12.0)	0.670 (17.0)	0.788 (20.0)	1.221 (31.0)	0.552 (14.0)	0.847 (21.5)	1.083 (27.5)
0.0680	1.221 (31.0)	0.493 (12.5)	0.709 (18.0)	1.083 (27.5)	1.378 (35.0)	0.552 (14.0)	0.945 (24.0)	1.182 (30.0)
0.1000	1.221 (31.0)	0.552 (14.0)	0.827 (21.0)	1.083 (27.5)	1.378 (35.0)	0.670 (17.0)	1.103 (28.0)	1.182 (30.0)

How to Order

Example: 103K1K2PAD3R (0.01 μ F \pm 10% 1200vdc PAD Kinked & Reel packaging)

103	K	1K2	POD	3R	XXX
Capacitance PF Code (2 significant digits + number of zeros)	Capacitance Tolerance	Voltage	Series Type	Lead Style and Packaging	Special Code
Examples: 102 = 0.001 μ F 103 = 0.010 μ F 104 = 0.100 μ F 224 = 0.220 μ F 225 = 2.200 μ F 106 = 10.00 μ F	J = \pm 5% K = \pm 10% M = \pm 20%	100 = 100 VDC 250 = 250 VDC 400 = 400 VDC 630 = 630 VDC 1K0 = 1000 VDC 1K2 = 1200 VDC 1K6 = 1600 VDC 2K0 = 2000 VDC 275 = 275 VAC	PAD PMD POD P XK		



Typical Polypropylene Temperature and Frequency Characteristics

