

ELECTRONIC FILM CAPACITORS, INC.

Reidville Industrial Park \* 41 Interstate Lane  
WATERBURY, CONNECTICUT 06705

PHONE (203) 755-5629 FAX (203) 755-0659



## POLYPROPYLENE SNUBBER

# SERIES M1206

EFC Series M1206 are polypropylene capacitors with double-sided metallized plates. This series offers the advantages of a self-healing metallized dielectric and the high current/pulsing capabilities (see dv/dt Table) of a metallized capacitor. Packaging options include: wrap and fill (TC, TF), radial lead box (EFR), and radial lead dip (DFR).

## SPECIFICATIONS

### 1. TEMPERATURE RANGE

- 55 °C to + 85 °C at rated voltage.  
To 105 °C with 25% voltage derating.

### 2. CAPACITANCE

Measured at 25°C at 1 kHz.

### 3. DIELECTRIC STRENGTH

At 25 °C, 200% of rated voltage for 10 seconds.

### 4. INSULATION RESISTANCE

At 25°C with maximum 2 minutes charge at rated voltage or 500 VDC, whichever is less, the minimum IR shall be 200,000 Megohm-Microfarads, but need not exceed 250,000 Megohms.

### 5. HUMIDITY RESISTANCE

Series M1206 shall meet the requirements of MIL-STD. 202C, Method 103B.

### 6. DISSIPATION FACTOR

Shall be 0.1% max. when measured at 25°C at 1 kHz.

### 7. LIFE TEST

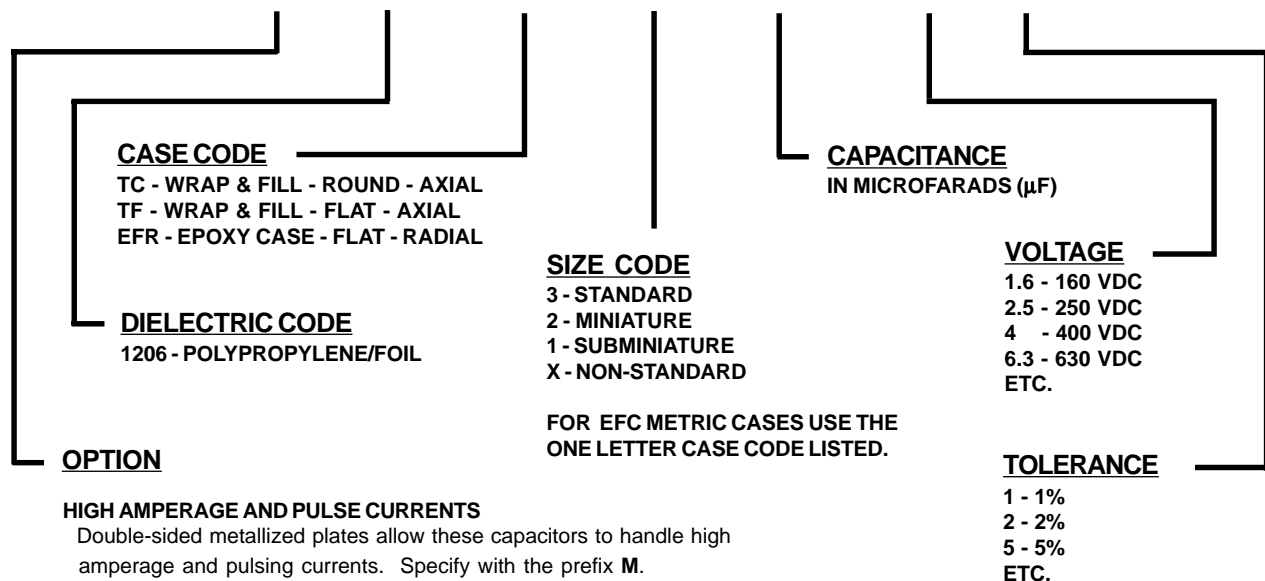
Will withstand the application of 140% rated voltage at +85°C for 250 hours with not more than one failure in 12 permitted.

### 8. PULSE RISE TIME (dv/dt)

Rated DC Voltage	Body Length (inches)			
	.500-.531	.709-.750	.968-1.04	1.19-1.26
160	200	110	70	55
250	400	150	130	85
400	420	200	130	100
630		400	190	120

## CATALOG NOMENCLATURE

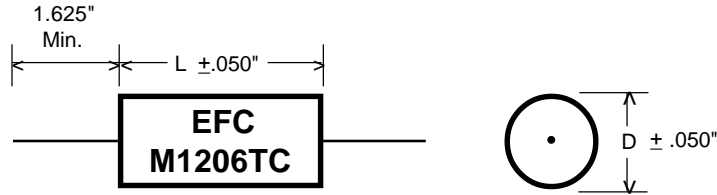
**M 1206 EFR - 3 - .001 - 1 - 5**





**Snubber Capacitors  
Polypropylene**

**Tubular  
Wrap and Fill**



**DIMENSIONS and RATINGS**

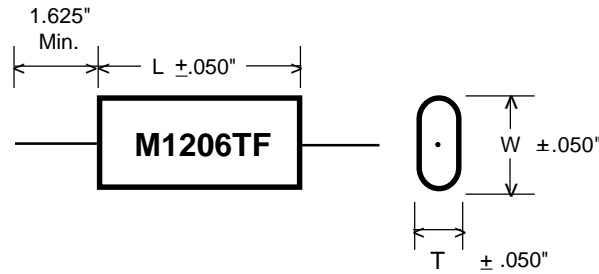
CAP. μF	160VDC/100VAC M1206TC-3		250VDC/160VAC M1206TC-3		400VDC/250VAC M1206TC-3		630VDC/300VAC M1206TC-3	
	D inches (mm)	L inches (mm)	D inches (mm)	L inches (mm)	D inches (mm)	L inches (mm)	D inches (mm)	L inches (mm)
0.001	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)
0.0012	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)
0.0015	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)
0.0022	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)
0.0027	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)
0.0033	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)
0.0039	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)
0.0047	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)
0.0056	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.190 (4.9)	0.531 (13.5)
0.0068	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.200 (5.2)	0.531 (13.5)
0.0082	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.220 (5.7)	0.531 (13.5)
0.01	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.240 (6.2)	0.531 (13.5)
0.012	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.220 (5.6)	0.531 (13.5)	0.260 (6.7)	0.531 (13.5)
0.015	0.180 (4.6)	0.531 (13.5)	0.180 (4.6)	0.531 (13.5)	0.240 (6.2)	0.531 (13.5)	0.290 (6.7)	0.531 (13.5)
0.018	0.180 (4.6)	0.531 (13.5)	0.200 (5.1)	0.531 (13.5)	0.260 (6.6)	0.531 (13.5)	0.320 (8.2)	0.531 (13.5)
0.022	0.190 (4.9)	0.531 (13.5)	0.230 (5.8)	0.531 (13.5)	0.280 (7.1)	0.531 (13.5)	0.260 (6.8)	0.750 (19.1)
0.027	0.220 (5.6)	0.531 (13.5)	0.240 (6.2)	0.531 (13.5)	0.310 (8.4)	0.531 (13.5)	0.290 (7.4)	0.750 (19.1)
0.033	0.240 (6.1)	0.531 (13.5)	0.260 (6.8)	0.531 (13.5)	0.330 (8.3)	0.531 (13.5)	0.320 (8.1)	0.750 (19.1)
0.039	0.250 (6.5)	0.531 (13.5)	0.310 (7.8)	0.531 (13.5)	0.290 (7.4)	0.750 (19.1)	0.340 (8.8)	0.750 (19.1)
0.047	0.280 (7.2)	0.531 (13.5)	0.330 (8.4)	0.531 (13.5)	0.310 (7.9)	0.750 (19.1)	0.370 (9.6)	0.750 (19.1)
0.056	0.320 (8.1)	0.531 (13.5)	0.350 (9.0)	0.531 (13.5)	0.330 (8.4)	0.750 (19.1)	0.320 (8.3)	0.968 (24.6)
0.068	0.340 (8.7)	0.531 (13.5)	0.300 (7.7)	0.750 (19.1)	0.350 (9.0)	0.750 (19.1)	0.360 (9.1)	0.968 (24.6)
0.082	0.290 (7.4)	0.750 (19.1)	0.320 (8.2)	0.750 (19.1)	0.320 (8.1)	0.968 (24.6)	0.390 (9.9)	0.968 (24.6)
0.1	0.310 (8.0)	0.750 (19.1)	0.350 (8.8)	0.750 (19.1)	0.340 (8.7)	0.968 (24.6)	0.430 (10.9)	0.968 (24.6)
0.12	0.330 (8.5)	0.750 (19.1)	0.370 (9.5)	0.750 (19.1)	0.370 (9.4)	0.968 (24.6)	0.470 (11.9)	0.968 (24.6)
0.15	0.360 (9.3)	0.750 (19.1)	0.350 (9.0)	0.968 (24.6)	0.410 (10.6)	0.968 (24.6)	0.520 (13.2)	0.968 (24.6)
0.18	0.390 (10.0)	0.750 (19.1)	0.380 (9.6)	0.968 (24.6)	0.450 (11.4)	0.968 (24.6)	0.500 (12.8)	1.190 (30.3)
0.22	0.350 (9.0)	0.968 (24.6)	0.400 (10.3)	0.968 (24.6)	0.480 (12.4)	0.968 (24.6)	0.550 (14.1)	1.190 (30.3)
0.27	0.380 (9.7)	0.968 (24.6)	0.440 (11.2)	0.968 (24.6)	0.530 (13.5)	1.190 (30.3)	0.610 (15.6)	1.190 (30.3)
0.33	0.410 (10.6)	0.968 (24.6)	0.480 (12.1)	0.968 (24.6)	0.520 (13.2)	1.190 (30.3)		
0.39	0.440 (11.3)	0.968 (24.6)	0.510 (13.0)	1.190 (30.3)	0.580 (14.8)	1.190 (30.3)		
0.47	0.490 (12.6)	0.968 (24.6)	0.550 (14.1)	1.190 (30.3)	0.600 (15.4)	1.190 (30.3)		
0.56	0.530 (13.6)	0.968 (24.6)	0.540 (13.7)	1.190 (30.3)	0.650 (16.6)	1.190 (30.3)		
0.68	0.520 (13.2)	1.190 (30.3)	0.580 (14.9)	1.190 (30.3)				
0.82	0.560 (14.3)	1.190 (30.3)	0.630 (16.2)	1.190 (30.3)				
1.00	0.610 (15.7)	1.190 (30.3)						
1.20	0.670 (17.0)	1.190 (30.3)						

EFC will manufacture to any non-standard value and size. Please consult factory for special requirements.



**Snubber Capacitors  
Polypropylene**

**Oval  
Wrap and Fill**



**DIMENSIONS and RATINGS**

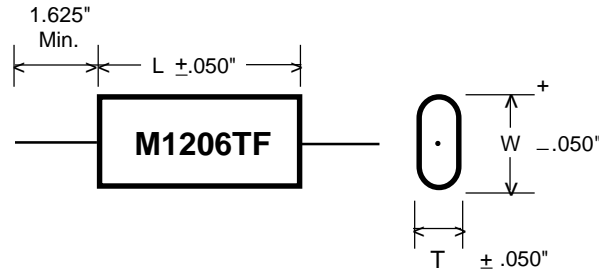
CAP. μF	M1206TF-3 160VDC/100VAC			M1206TF-3 250VDC/160VAC		
	T inches (mm)	H inches (mm)	L inches (mm)	T inches (mm)	H inches (mm)	L inches (mm)
0.001	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0012	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0015	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0022	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0027	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0033	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0039	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0047	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0056	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0068	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0082	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.01	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.012	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.015	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.018	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.250 (6.4)	0.531 (13.5)
0.022	0.120 (3.1)	0.240 (6.1)	0.531 (13.5)	0.120 (3.1)	0.290 (7.5)	0.531 (13.5)
0.027	0.120 (3.1)	0.280 (7.2)	0.531 (13.5)	0.140 (3.6)	0.310 (7.9)	0.531 (13.5)
0.033	0.130 (3.3)	0.300 (7.7)	0.531 (13.5)	0.150 (3.9)	0.320 (8.3)	0.531 (13.5)
0.039	0.150 (3.8)	0.310 (8.0)	0.531 (13.5)	0.150 (3.9)	0.400 (10.1)	0.531 (13.5)
0.047	0.160 (4.0)	0.350 (9.0)	0.531 (13.5)	0.170 (4.3)	0.420 (10.6)	0.531 (13.5)
0.056	0.170 (4.3)	0.410 (10.3)	0.531 (13.5)	0.190 (4.9)	0.440 (11.2)	0.531 (13.5)
0.068	0.180 (4.6)	0.430 (11.0)	0.531 (13.5)	0.140 (3.6)	0.390 (9.9)	0.750 (19.1)
0.082	0.130 (3.3)	0.380 (9.7)	0.750 (19.1)	0.160 (4.1)	0.410 (10.5)	0.750 (19.1)
0.1	0.150 (3.9)	0.400 (10.2)	0.750 (19.1)	0.180 (4.7)	0.430 (11.1)	0.750 (19.1)
0.12	0.170 (4.4)	0.420 (10.8)	0.750 (19.1)	0.210 (5.4)	0.460 (11.7)	0.750 (19.1)
0.15	0.200 (5.2)	0.450 (11.6)	0.750 (19.1)	0.160 (4.1)	0.460 (11.7)	0.968 (24.6)
0.18	0.230 (5.9)	0.480 (11.3)	0.750 (19.1)	0.180 (4.7)	0.480 (12.3)	0.968 (24.6)
0.22	0.190 (4.9)	0.440 (11.2)	0.968 (24.6)	0.210 (5.5)	0.510 (13.0)	0.968 (24.6)
0.27	0.220 (5.6)	0.470 (12.0)	0.968 (24.6)	0.250 (6.3)	0.550 (13.9)	0.968 (24.6)
0.33	0.250 (6.5)	0.500 (12.8)	0.968 (24.6)	0.280 (7.3)	0.580 (14.9)	0.968 (24.6)
0.39	0.280 (7.2)	0.530 (13.6)	0.968 (24.6)	0.320 (8.2)	0.620 (15.7)	1.190 (30.3)
0.47	0.300 (7.7)	0.600 (15.3)	0.968 (24.6)	0.360 (9.2)	0.660 (16.8)	1.190 (30.3)
0.56	0.340 (8.7)	0.640 (16.3)	0.968 (24.6)	0.340 (8.8)	0.640 (16.4)	1.190 (30.3)
0.68	0.330 (8.3)	0.630 (15.9)	1.190 (30.3)	0.390 (10.0)	0.690 (17.6)	1.190 (30.3)
0.82	0.370 (9.5)	0.670 (17.0)	1.190 (30.3)	0.440 (11.3)	0.740 (18.9)	1.190 (30.3)
1.00	0.420 (10.8)	0.720 (18.4)	1.190 (30.3)			
1.20	0.480 (12.1)	0.770 (19.7)	1.190 (30.3)			

EFC will manufacture to any non-standard value and size. Please consult factory for special requirements.



**Snubber Capacitors  
Polypropylene**

**Oval  
Wrap and Fill**



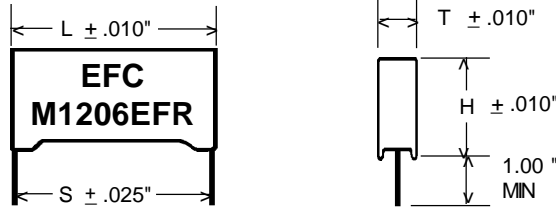
**DIMENSIONS and RATINGS**

CAP. μF	M1206TF-3 400VDC/250VAC			M1206TF-3 630VDC/300VAC		
	T inches (mm)	H inches (mm)	L inches (mm)	T inches (mm)	H inches (mm)	L inches (mm)
0.001	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0012	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0015	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0022	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0027	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0033	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0039	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0047	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)
0.0056	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.250 (6.4)	0.531 (13.5)
0.0068	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.120 (3.1)	0.260 (6.5)	0.531 (13.5)
0.0082	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.140 (3.6)	0.270 (7.0)	0.531 (13.5)
0.01	0.120 (3.1)	0.220 (5.6)	0.531 (13.5)	0.160 (4.1)	0.290 (7.5)	0.531 (13.5)
0.012	0.120 (3.1)	0.320 (8.2)	0.531 (13.5)	0.180 (4.6)	0.310 (8.0)	0.531 (13.5)
0.015	0.120 (3.1)	0.320 (8.2)	0.531 (13.5)	0.210 (5.5)	0.340 (8.8)	0.531 (13.5)
0.018	0.130 (3.4)	0.330 (8.5)	0.531 (13.5)	0.240 (6.1)	0.370 (9.4)	0.531 (13.5)
0.022	0.150 (3.9)	0.350 (9.0)	0.531 (13.5)	0.180 (4.6)	0.320 (8.1)	0.750 (19.1)
0.027	0.160 (4.1)	0.410 (10.4)	0.531 (13.5)	0.180 (4.7)	0.340 (8.7)	0.750 (19.1)
0.033	0.200 (5.0)	0.400 (10.1)	0.531 (13.5)	0.230 (6.0)	0.360 (9.3)	0.750 (19.1)
0.039	0.130 (3.3)	0.380 (9.6)	0.750 (19.1)	0.260 (6.6)	0.390 (9.9)	0.750 (19.1)
0.047	0.150 (3.9)	0.400 (10.1)	0.750 (19.1)	0.290 (7.4)	0.420 (10.7)	0.750 (19.1)
0.056	0.170 (4.3)	0.420 (10.6)	0.750 (19.1)	0.240 (6.1)	0.370 (9.5)	0.968 (24.6)
0.068	0.190 (4.9)	0.440 (11.3)	0.750 (19.1)	0.270 (6.9)	0.400 (10.2)	0.968 (24.6)
0.082	0.160 (4.0)	0.410 (11.3)	0.968 (24.6)	0.300 (7.8)	0.430 (11.1)	0.968 (24.6)
0.1	0.180 (4.6)	0.430 (11.0)	0.968 (24.6)	0.340 (8.7)	0.470 (12.0)	0.968 (24.6)
0.12	0.210 (5.3)	0.460 (11.6)	0.968 (24.6)	0.380 (9.7)	0.510 (13.0)	0.968 (24.6)
0.15	0.220 (5.7)	0.520 (13.3)	0.968 (24.6)	0.430 (11.1)	0.560 (14.4)	0.968 (24.6)
0.18	0.250 (6.5)	0.550 (14.1)	0.968 (24.6)	0.420 (10.6)	0.530 (13.9)	1.190 (30.3)
0.22	0.290 (7.5)	0.590 (15.1)	0.968 (24.6)	0.470 (11.9)	0.600 (15.2)	1.190 (30.3)
0.27	0.340 (8.6)	0.640 (16.2)	1.190 (30.3)	0.530 (13.4)	0.660 (16.7)	1.190 (30.3)
0.33	0.330 (8.3)	0.620 (15.9)	1.190 (30.3)			
0.39	0.330 (8.3)	0.720 (18.4)	1.190 (30.3)			
0.47	0.410 (10.5)	0.710 (18.1)	1.190 (30.3)			
0.56	0.460 (11.8)	0.760 (19.4)	1.190 (30.3)			
0.68						
0.82						
1.00						
1.20						

EFC will manufacture to any non-standard value and size. Please consult factory for special requirements.



**Snubber Capacitors  
Polypropylene**



Lead Specs.  
Tinned Copperweld

C through E cases: 22 AWG  
F through Q cases: 20 AWG

**DIMENSIONS and RATINGS**

Cap. μF	160/100 VDC/VAC	250/160 VDC/VAC	400/250 VDC/VAC	630/300 VDC/VAC	CASE SIZE	L mm in.	T mm in.	H mm in.	S mm in.
0.001	C	C	C	C	C	.13	.4	.9	.10
0.0012	C	C	C	C	C	.512	.157	.354	.394
0.0015	C	C	C	C	D	.13	.5	.11	.10
0.0022	C	C	C	C	D	.512	.197	.433	.394
0.0027	C	C	C	C	E	.13	.6	.12	.10
0.0033	C	C	C	C	E	.512	.236	.472	.394
0.0039	C	C	C	C	F	.18	.5	.11	.15
0.0047	C	C	C	C	F	.709	.197	.433	.591
0.0056	C	C	C	C	G	.18	.6	.12	.15
0.0068	C	C	C	C	G	.709	.236	.472	.591
0.0082	C	C	C	D	H	.18	.75	.13.5	.15
0.01	C	C	C	D	H	.709	.295	.531	.591
0.012	C	C	C	D	L	.26.5	.6	.15	.22.5
0.015	C	C	C	E	L	1.04	.236	.591	.886
0.018	C	C	D	E	M	.26.5	.7	.16	.22.5
0.022	C	C	D	F	M	1.04	.276	.630	.886
0.027	C	D	D	F	N	.26.5	.8.5	.16.3	.22.5
0.033	C	D	E	G	N	1.04	.335	.642	.886
0.039	D	D	F	H	O	.26.5	.10	.19	.22.5
0.047	D	E	G	H	O	1.04	.394	.748	.886
0.056	E	E	G	L	P	.32	.11	.20	.27.5
0.068	E	F	G	L	P	1.26	.433	.787	1.08
0.082	F	G	L	M	Q	.32	.13	.22	.27.5
0.1	F	G	L	N	Q	1.26	.512	.866	1.08
0.12	G	H	M	N					
0.15	G	L	M	O					
0.18	H	L	N	P					
0.22	L	L	N	P					
0.27	M	M	O	P					
0.33	N	N	P	Q					
0.39	N	O	P						
0.47	O	O	Q						
0.56	O	P	Q						
0.68	P	P							
0.82	P	Q							
1.00	Q								
1.20	Q								

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