

# ELECTRONIC FILM CAPACITORS, INC.

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

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



## POLYPROPYLENE SNUBBER

### SERIES MF1206

EFC Series MF1206 are polypropylene capacitors with an internal series construction of double-sided metallized carrier and foil contact plates. This series offers the advantages of a self-healing metallized dielectric and the high current/pulsing capabilities (see dv/dt Table) of a foil 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, 160% 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 MF1206 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

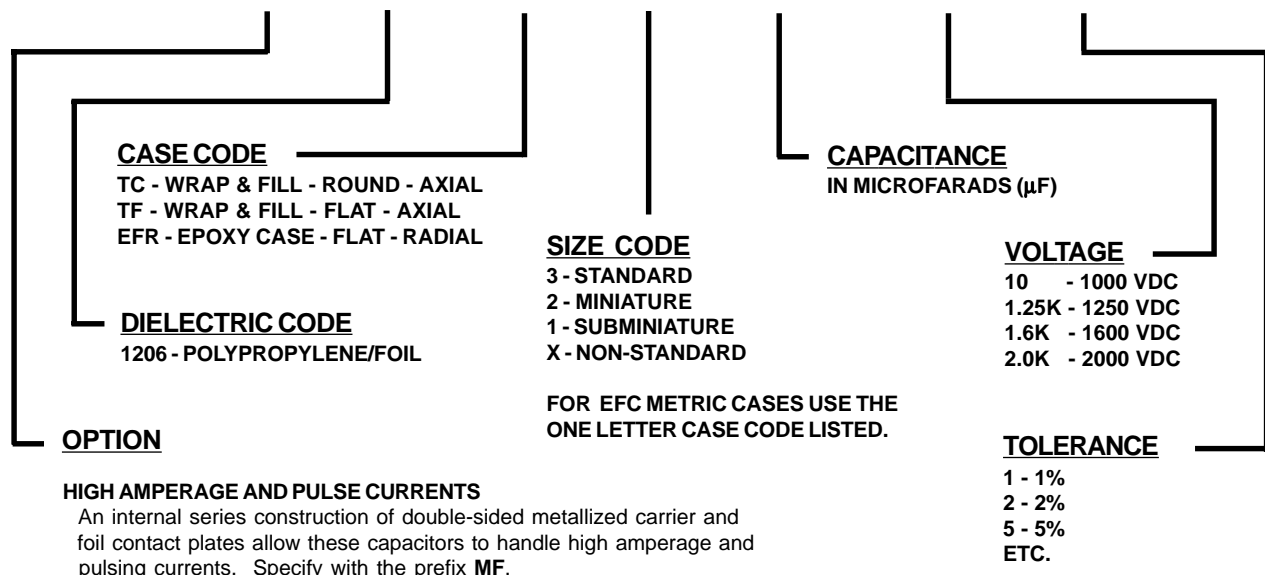
Will withstand the application of 140% rated voltage at +85°C for 250 hours with not more than one failure in 12 permitted.

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

Rated DC Voltage	Body Length (inches)		
	.709-.750	.968-1.04	1.19-1.26
1000	4500	2000	1000
1250	5500	2400	1000
1600	7500	5000	3000
2000	9500	6000	4500

### CATALOG NOMENCLATURE

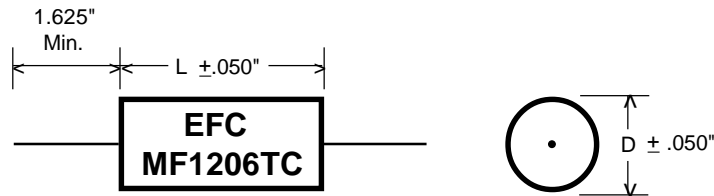
**MF 1206 EFR - 3 - .001 - 1.6K - 5**





**Snubber Capacitors  
Polypropylene**

**Tubular  
Wrap and Fill**



**DIMENSIONS and RATINGS**

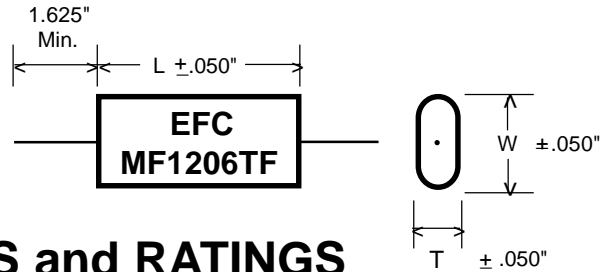
CAP. μF	1000VDC/350VAC MF1206TC-3		1250VDC/400VAC MF1206TC-3		1600VDC/500VAC MF1206TC-3		2000VDC/560VAC MF1206TC-3	
	D	L	D	L	D	L	D	L
	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)
<b>0.001</b>	0.210 (5.4)	0.750 (19.1)	0.240 (6.1)	0.750 (19.1)	0.310 (7.9)	0.750 (19.1)	0.250 (6.3)	0.750 (19.1)
<b>0.0012</b>	0.230 (5.9)	0.750 (19.1)	0.260 (6.6)	0.750 (19.1)	0.330 (8.5)	0.750 (19.1)	0.260 (6.6)	0.750 (19.1)
<b>0.0015</b>	0.260 (6.5)	0.750 (19.1)	0.290 (7.3)	0.750 (19.1)	0.360 (9.2)	0.750 (19.1)	0.280 (7.1)	0.750 (19.1)
<b>0.0022</b>	0.310 (8.0)	0.750 (19.1)	0.340 (8.7)	0.750 (19.1)	0.260 (6.5)	0.968 (24.6)	0.320 (8.2)	0.968 (24.6)
<b>0.0027</b>	0.340 (8.7)	0.750 (19.1)	0.240 (6.1)	0.968 (24.6)	0.280 (7.1)	0.968 (24.6)	0.350 (8.8)	0.968 (24.6)
<b>0.0033</b>	0.380 (9.7)	0.750 (19.1)	0.260 (6.7)	0.968 (24.6)	0.320 (8.0)	0.968 (24.6)	0.380 (9.6)	0.968 (24.6)
<b>0.0039</b>	0.240 (6.1)	0.968 (24.6)	0.290 (7.4)	0.968 (24.6)	0.340 (8.6)	0.968 (24.6)	0.400 (10.3)	0.968 (24.6)
<b>0.0047</b>	0.260 (6.6)	0.968 (24.6)	0.320 (8.0)	0.968 (24.6)	0.380 (9.5)	0.968 (24.6)	0.440 (11.1)	0.968 (24.6)
<b>0.0056</b>	0.280 (7.2)	0.968 (24.6)	0.340 (8.7)	0.968 (24.6)	0.410 (10.3)	0.968 (24.6)	0.470 (12.0)	0.968 (24.6)
<b>0.0068</b>	0.310 (7.9)	0.968 (24.6)	0.370 (9.4)	0.968 (24.6)	0.450 (11.5)	0.968 (24.6)	0.510 (13.1)	0.968 (24.6)
<b>0.0082</b>	0.340 (8.8)	0.968 (24.6)	0.410 (10.4)	0.968 (24.6)	0.490 (12.5)	0.968 (24.6)	0.480 (12.1)	1.190 (30.2)
<b>0.01</b>	0.380 (9.6)	0.968 (24.6)	0.430 (10.8)	0.968 (24.6)	0.470 (11.8)	0.968 (24.6)	0.520 (13.2)	1.190 (30.2)
<b>0.012</b>	0.410 (10.4)	0.968 (24.6)	0.460 (11.7)	0.968 (24.6)	0.510 (12.8)	0.968 (24.6)	0.570 (14.4)	1.190 (30.2)
<b>0.015</b>	0.460 (11.6)	0.968 (24.6)	0.470 (11.9)	1.190 (30.2)	0.560 (14.2)	1.190 (30.2)	0.630 (15.9)	1.190 (30.2)
<b>0.018</b>	0.500 (12.8)	0.968 (24.6)	0.520 (13.1)	1.190 (30.2)	0.610 (15.4)	1.190 (30.2)		
<b>0.022</b>	0.480 (12.1)	1.190 (30.2)	0.570 (14.4)	1.190 (30.2)				
<b>0.027</b>	0.530 (13.3)	1.190 (30.2)	0.620 (15.8)	1.190 (30.2)				
<b>0.033</b>	0.580 (14.7)	1.190 (30.2)						
<b>0.039</b>	0.630 (15.9)	1.190 (30.2)						

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**

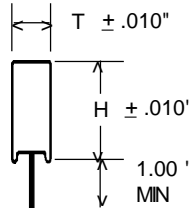
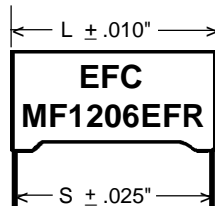
CAP. μF	MF1206TF-3 1000VDC/350VAC			MF1206TF-3 1250VDC/400VAC		
	T inches (mm)	H inches (mm)	L inches (mm)	T inches (mm)	H inches (mm)	L inches (mm)
0.001	0.130 (3.4)	0.260 (6.6)	0.750 (19.1)	0.160 (4.1)	0.290 (7.2)	0.750 (19.1)
0.0012	0.150 (3.9)	0.280 (7.1)	0.750 (19.1)	0.180 (4.6)	0.300 (7.7)	0.750 (19.1)
0.0015	0.189 (4.5)	0.300 (7.7)	0.750 (19.1)	0.210 (5.2)	0.330 (8.4)	0.750 (19.1)
0.0022	0.210 (5.3)	0.370 (9.5)	0.750 (19.1)	0.260 (6.6)	0.390 (9.8)	0.750 (19.1)
0.0027	0.240 (6.0)	0.400 (10.3)	0.750 (19.1)	0.160 (4.1)	0.290 (7.3)	0.968 (24.6)
0.0033	0.269 (6.5)	0.450 (11.5)	0.750 (19.1)	0.180 (4.6)	0.310 (7.8)	0.968 (24.6)
0.0039	0.160 (4.1)	0.290 (7.3)	0.968 (24.6)	0.190 (4.7)	0.350 (8.9)	0.968 (24.6)
0.0047	0.180 (4.6)	0.310 (7.8)	0.968 (24.6)	0.210 (5.3)	0.380 (9.6)	0.968 (24.6)
0.0056	0.200 (5.1)	0.330 (7.8)	0.968 (24.6)	0.230 (6.0)	0.400 (10.2)	0.968 (24.6)
0.0068	0.230 (5.8)	0.350 (9.0)	0.968 (24.6)	0.270 (6.8)	0.430 (11.0)	0.968 (24.6)
0.0082	0.240 (6.1)	0.410 (10.3)	0.968 (24.6)	0.290 (7.3)	0.480 (12.2)	0.968 (24.6)
0.01	0.270 (6.9)	0.440 (11.1)	0.968 (24.6)	0.300 (7.6)	0.500 (12.6)	0.968 (24.6)
0.012	0.300 (7.7)	0.470 (12.0)	0.968 (24.6)	0.340 (8.6)	0.530 (13.6)	0.968 (24.6)
0.015	0.350 (8.9)	0.520 (13.1)	0.968 (24.6)	0.340 (8.6)	0.540 (13.7)	1.190 (30.2)
0.018	0.380 (9.6)	0.570 (14.6)	0.968 (24.6)	0.360 (9.2)	0.610 (15.4)	1.190 (30.2)
0.022	0.370 (9.4)	0.540 (13.6)	1.190 (30.2)	0.410 (10.4)	0.650 (16.6)	1.190 (30.2)
0.027	0.420 (9.7)	0.590 (14.9)	1.190 (30.2)	0.470 (11.8)	0.710 (18.0)	1.190 (30.2)
0.033	0.470 (12.0)	0.640 (16.2)	1.190 (30.2)			
0.039	0.520 (13.2)	0.690 (17.5)	1.190 (30.2)			

CAP. μF	MF1206TF-3 1600VDC/500VAC			MF1206TF-3 2000VDC/560VAC		
	T inches (mm)	H inches (mm)	L inches (mm)	T inches (mm)	H inches (mm)	L inches (mm)
0.001	0.160 (3.9)	0.400 (10.2)	0.750 (19.1)	0.130 (3.3)	0.370 (9.5)	0.750 (19.1)
0.0012	0.180 (4.5)	0.420 (10.7)	0.750 (19.1)	0.130 (3.3)	0.370 (9.5)	0.750 (19.1)
0.0015	0.210 (5.3)	0.450 (11.5)	0.750 (19.1)	0.130 (3.3)	0.370 (9.5)	0.750 (19.1)
0.0022	0.180 (4.5)	0.300 (7.7)	0.968 (24.6)	0.170 (4.2)	0.410 (10.4)	0.968 (24.6)
0.0027	0.200 (5.1)	0.330 (8.3)	0.968 (24.6)	0.190 (4.9)	0.440 (11.1)	0.968 (24.6)
0.0033	0.210 (5.3)	0.380 (9.6)	0.968 (24.6)	0.220 (5.6)	0.470 (11.8)	0.968 (24.6)
0.0039	0.230 (5.9)	0.400 (10.2)	0.968 (24.6)	0.250 (6.3)	0.490 (12.5)	0.968 (24.6)
0.0047	0.250 (6.4)	0.450 (11.4)	0.968 (24.6)	0.280 (7.1)	0.530 (13.4)	0.968 (24.6)
0.0056	0.280 (7.1)	0.480 (12.1)	0.968 (24.6)	0.320 (8.0)	0.560 (14.2)	0.968 (24.6)
0.0068	0.300 (7.5)	0.540 (13.8)	0.968 (24.6)	0.360 (9.1)	0.600 (15.3)	0.968 (24.6)
0.0082	0.340 (8.5)	0.580 (14.7)	0.968 (24.6)	0.320 (8.1)	0.570 (14.4)	0.968 (24.6)
0.01	0.310 (7.9)	0.550 (14.1)	0.968 (24.6)	0.360 (9.3)	0.610 (15.5)	0.968 (24.6)
0.012	0.350 (8.9)	0.590 (15.1)	0.968 (24.6)	0.410 (10.4)	0.650 (15.6)	0.968 (24.6)
0.015	0.400 (10.2)	0.650 (16.4)	1.190 (30.2)	0.470 (12.0)	0.720 (18.2)	1.190 (30.2)
0.018	0.450 (11.5)	0.700 (17.7)	1.190 (30.2)			

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



**Snubber Capacitors  
Polypropylene**



Lead Specs.  
Tinned Copperweld

All cases: 20 AWG

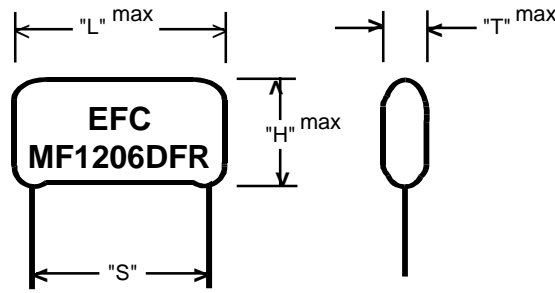
**DIMENSIONS and RATINGS**

Cap. $\mu$ F	1000/350 VDC/VAC	1250/400 VDC/VAC	1600/500 VDC/VAC	2000/560 VDC/VAC	CASE SIZE	L $\frac{mm}{in.}$	T $\frac{mm}{in.}$	H $\frac{mm}{in.}$	S $\frac{mm}{in.}$
0.001	F	F	G	J/L	F	$\frac{18}{.709}$	$\frac{5}{.197}$	$\frac{11}{.433}$	$\frac{15}{.591}$
0.0012	F	F	G	J/L	G	$\frac{18}{.709}$	$\frac{6}{.236}$	$\frac{12}{.472}$	$\frac{15}{.591}$
0.0015	F	G	H	J/L		$\frac{18}{.709}$	$\frac{6}{.236}$	$\frac{12}{.472}$	$\frac{15}{.591}$
0.0022	G	H	J/L	J/L	H	$\frac{18}{.709}$	$\frac{7.5}{.295}$	$\frac{13.5}{.531}$	$\frac{15}{.591}$
0.0027	H	J/L	J/L	K/M		$\frac{18}{.709}$	$\frac{7.5}{.295}$	$\frac{13.5}{.531}$	$\frac{15}{.591}$
0.0033	H	J/L	J/L	K/M	J	$\frac{26.5}{1.04}$	$\frac{6}{.236}$	$\frac{15}{.591}$	$\frac{20}{.787}$
0.0039	J/L	J/L	K/M	N		$\frac{26.5}{1.04}$	$\frac{6}{.236}$	$\frac{15}{.591}$	$\frac{20}{.787}$
0.0047	J/L	J/L	K/M	N	K	$\frac{26.5}{1.04}$	$\frac{7}{.276}$	$\frac{16}{.630}$	$\frac{20}{.787}$
0.0056	J/L	K/M	N	N		$\frac{26.5}{1.04}$	$\frac{7}{.276}$	$\frac{16}{.630}$	$\frac{20}{.787}$
0.0068	J/L	N	N	O	L	$\frac{26.5}{1.04}$	$\frac{6}{.236}$	$\frac{15}{.591}$	$\frac{22.5}{.886}$
0.0082	K/M	N	O	P		$\frac{26.5}{1.04}$	$\frac{6}{.236}$	$\frac{15}{.591}$	$\frac{22.5}{.886}$
0.01	K/M	O	P	P	M	$\frac{26.5}{1.04}$	$\frac{7}{.276}$	$\frac{16}{.630}$	$\frac{22.5}{.886}$
0.012	N	O	P	P		$\frac{26.5}{1.04}$	$\frac{7}{.276}$	$\frac{16}{.630}$	$\frac{22.5}{.886}$
0.015	O	P	Q	Q	N	$\frac{26.5}{1.04}$	$\frac{8.5}{.335}$	$\frac{16.3}{.642}$	$\frac{22.5}{.886}$
0.018	O	P	Q	Q		$\frac{26.5}{1.04}$	$\frac{8.5}{.335}$	$\frac{16.3}{.642}$	$\frac{22.5}{.886}$
0.022	P	Q			O	$\frac{26.5}{1.04}$	$\frac{10}{.394}$	$\frac{19}{.748}$	$\frac{22.5}{.886}$
0.027	P	Q				$\frac{26.5}{1.04}$	$\frac{10}{.394}$	$\frac{19}{.748}$	$\frac{22.5}{.886}$
0.033	Q				P	$\frac{32}{1.26}$	$\frac{11}{.433}$	$\frac{20}{.787}$	$\frac{27.5}{1.08}$
0.039	Q					$\frac{32}{1.26}$	$\frac{11}{.433}$	$\frac{20}{.787}$	$\frac{27.5}{1.08}$
					Q	$\frac{32}{1.26}$	$\frac{13}{.512}$	$\frac{22}{.866}$	$\frac{27.5}{1.08}$

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



**Series  
Polypropylene  
and Foil  
Capacitors**



**MF1206DFR**

**Epoxy Dipped  
(Radial Leads)**

Lead Specs. - Tinned Copperweld

L	S	DIA.
18.5	15.0	0.8
26.0	22.5	0.8
31.0	27.5	0.8
44.0	38.0	0.8

(All dimensions in millimeters)

**DIMENSIONS and RATINGS**

Cap.	MF1206DFR-3 400VDC/350VAC			MF1206DFR-3 630VDC/400VAC			MF1206DFR-3 1000VDC/500VAC			MF1206DFR-3 1600VDC/550VAC			MF1206DFR-3 2000VDC/600VAC								
	T	H	L	T	H	L	T	H	L	T	H	L	T	H	L						
.001	4.5	9.0	18.5	4.5	9.0	18.5	4.5	9.0	18.5	5.0	10.0	18.5	6.0	12.0	18.5						
.0012	4.5	9.0	18.5	4.5	9.0	18.5	4.5	9.0	18.5	5.5	10.0	18.5	6.5	12.0	18.5						
.0015	4.5	9.0	18.5	4.5	9.0	18.5	5.0	9.5	18.5	5.5	11.0	18.5	7.0	13.0	18.5						
.0022	4.5	9.0	18.5	4.5	9.0	18.5	5.0	11.0	18.5	6.5	12.5	18.5	8.0	14.0	18.5						
.0027	4.5	9.0	18.5	4.5	9.0	18.5	6.0	12.0	18.5	7.0	13.0	18.5	7.0	13.0	26.0						
.0039	4.5	9.0	18.5	5.0	10.0	18.5	7.0	13.0	18.5	8.0	14.5	18.5	7.5	14.5	26.0						
.0047	4.5	9.0	18.5	5.5	10.5	18.5	7.5	13.5	18.5	7.0	13.0	18.5	8.5	16.0	26.0						
.0056	5.0	9.5	18.5	5.5	11.0	18.5	8.0	14.0	18.5	8.0	14.0	18.5	9.0	16.5	26.0						
.0068	5.0	10.0	18.5	6.0	12.0	18.5	8.5	15.0	18.5	8.5	15.0	26.0	9.5	18.0	26.0						
.0082	5.5	11.0	18.5	6.5	12.5	18.5	8.5	16.0	18.5	8.5	16.0	26.0	9.0	16.5	31.0						
.01	6.0	12.0	18.5	7.0	13.0	18.5	7.5	14.0	26.0	9.0	17.0	26.0	9.5	17.5	31.0						
.012	6.5	12.5	18.5	7.5	14.0	18.5	8.5	15.5	26.0	9.5	18.5	26.0	10.0	19.0	31.0						
.015	7.0	13.0	18.5	8.5	15.5	18.5	9.0	16.5	26.0	9.5	17.0	31.0	11.0	21.0	31.0						
.018	7.5	13.5	18.5	7.5	13.5	26.0	9.5	17.0	26.0	10.0	19.0	31.0	12.0	22.0	31.0						
.022	8.5	15.0	18.5	8.5	15.5	26.0	9.0	16.5	31.0	11.0	20.5	31.0	13.0	24.0	31.0						
.027	9.0	16.0	18.5	9.0	16.0	26.0	9.5	17.5	31.0	12.0	22.0	31.0	12.0	22.0	44.0						
.033	8.0	14.0	26.0	9.5	17.0	26.0	10.5	20.0	31.0	13.0	24.0	31.0	13.0	24.0	44.0						
.039	8.5	15.5	26.0	9.5	18.0	26.0	11.0	21.0	31.0	12.0	22.0	44.0	14.0	26.0	44.0						
.047	9.0	16.5	26.0	9.0	16.5	31.0	12.5	22.0	31.0	13.0	24.0	44.0	15.0	28.0	44.0						
.056	9.5	17.0	26.0	9.5	18.0	31.0	13.0	24.0	31.0	13.5	25.0	44.0									
.068	9.5	18.0	26.0	10.0	19.5	31.0	12.0	21.5	44.0	15.0	27.5	44.0									
.082	9.5	18.0	31.0	11.5	21.0	31.0	13.0	24.0	44.0	16.5	30.0	44.0									
.1	10.0	19.0	31.0	12.5	22.0	31.0	14.0	26.0	44.0	18.0	34.0	44.0									
.12	11.0	20.0	31.0	11.5	21.0	44.0	15.5	28.0	44.0												
.15	12.0	22.0	31.0	12.5	22.0	44.0	17.0	32.0	44.0												
.18	13.0	24.0	31.0	13.0	24.0	44.0	19.0	35.0	44.0												
.22	12.0	22.0	44.0	14.5	26.5	44.0	21.0	37.0	44.0												
.27	13.0	24.0	44.0	16.0	29.0	44.0															
.33	14.0	26.0	44.0	17.5	33.0	44.0															
.39	15.0	27.0	44.0	19.0	35.0	44.0															
.47	16.5	30.0	44.0	21.0	37.0	44.0															

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

**ELECTRONIC FILM CAPACITORS, INC.**

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

Phone (203) 755-5629 \* E-Mail: efc@filmcapacitors.com \* FAX (203) 755-0659