



# Series MF1206 Polypropylene Ultra Pulse Snubber

**Features:** Flame retardant to UL94, internal series construction of double-sided metallized carrier, foil contact plates, “self healing” metallized dielectric, high current/pulsing capabilities (see dv/dt table).  
**Packaging:** Axial wrap and fill (TC, TF), radial lead box (EFR).

## Specifications

### 1) Temperature Range

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

### 2) Capacitance

0.001 $\mu$ F to 0.039 $\mu$ F

### 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, but no greater than 500 VDC.  
The minimum IR shall be 200,000 Megohm-  
Microfarads, but need not exceed 250,000  
Megohms.

### 5) Humidity Resistance

MIL-STD. 202C, Method 103B.

### 6) Dissipation Factor

Shall be 0.1% max. at 25°C at 1kHz.

### 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) 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

**\* 1 3 0 6 E F R - 3 - . 0 0 1 - 1 - 5**

**Case Code:**

- TC - Wrap & Fill - Round - Axial
- TF - Wrap & Fill - Flat - Axial
- EC - Epoxy Case - Round - Axial
- EFR - Epoxy Case - Flat - Radial
- DFR - Dipped Construction - Flat - Radial
- HS - Hermetically Sealed

**Dielectric Code:**

- 1206 - Polypropylene/Foil
- 1213 - Metallized Polypropylene
- 1306 - Polyester/Foil
- 1313 - Metallized Polyester
- 1613 - Metallized Polycarbonate
- 1906 - Polystyrene/Foil
- 2113 - Metallized Polyphenylene Sulfide

**Size Code:**

- 3 - Standard
- 2 - Miniature (1313DFR Series Only)
- X - Non-standard
- Or one letter case code

**Capacitance:**

In microfarads ( $\mu\text{F}$ )

**Voltage:**

- .35 - 35 VDC
- 0 - 50 VDC
- 1 - 100 VDC
- 2 - 200 VDC
- 3 - 300 VDC
- 4 - 400 VDC
- 10 - 1000 VDC
- 1.6K - 1600VDC
- Etc.

**Tolerance:**

- 1 - 1%
- 2 - 2%
- 5 - 5%
- Etc.

**\* Options**

The following options are available from EFC by specifying the appropriate prefix.

- A - Aluminum foil electrodes
- T - Tin foil electrodes
- HV - High voltage DC applications
- AC - AC voltage rated applications
- MF - Metallized and foil hybrid for maximum pulse current applications
- M - Dual metallized design for pulse current applications
- SP - Low ESR, high RMS current applications
- PC - Direct mount terminals for high current filter applications
- FT - Feed thru filter applications
- RC - Resistor capacitor suppressors





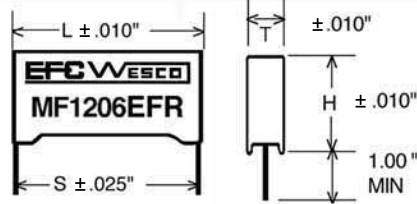
Please consult factory for special requirements, including non-standard values and sizes

**MF1206EFR**  
Rectangular Plastic Case  
(Radial Leads)

**Polypropylene  
Snubber Capacitors**

Lead Spec.  
Tinned Copperweld  
B through E cases: 22 AWG  
F through Q cases: 20 AWG

## Dimensions and Ratings



Cap.		1000 VDC / 350 VAC			
µF	Part #	T in. (mm)	L in. (mm)	H in. (mm)	S in. (mm)
.001	MF1206EFR-F-.001-10-*	.197 (5.0)	.709 (18.0)	.433 (11.0)	.591 (15.0)
.0012	MF1206EFR-F-.0012-10-*	.197 (5.0)	.709 (18.0)	.433 (11.0)	.591 (15.0)
.0015	MF1206EFR-F-.0015-10-*	.197 (5.0)	.709 (18.0)	.433 (11.0)	.591 (15.0)
.0022	MF1206EFR-G-.0022-10-*	.236 (6.0)	.709 (18.0)	.472 (12.0)	.591 (15.0)
.0027	MF1206EFR-H-.0027-10-*	.295 (7.5)	.709 (18.0)	.531 (13.5)	.591 (15.0)
.0033	MF1206EFR-H-.0033-10-*	.295 (7.5)	.709 (18.0)	.531 (13.5)	.591 (15.0)
.0039	MF1206EFR-J-.0039-10-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.0039	MF1206EFR-L-.0039-10-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.0047	MF1206EFR-J-.0047-10-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.0047	MF1206EFR-L-.0047-10-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.0056	MF1206EFR-J-.0056-10-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.0056	MF1206EFR-L-.0056-10-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.0068	MF1206EFR-L-.0068-10-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.0068	MF1206EFR-L-.0068-10-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.0082	MF1206EFR-K-.0082-10-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.787 (20.0)
.0082	MF1206EFR-M-.0082-10-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.886 (22.5)
.01	MF1206EFR-K-.01-10-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.787 (20.0)
.01	MF1206EFR-M-.01-10-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.886 (22.5)
.012	MF1206EFR-N-.012-10-*	.335 (8.5)	1.04 (26.5)	.642 (16.3)	.886 (22.5)
.015	MF1206EFR-O-.015-10-*	.394 (10.0)	1.04 (26.5)	.748 (19.0)	.886 (22.5)
.018	MF1206EFR-O-.018-10-*	.394 (10.0)	1.04 (26.5)	.748 (19.0)	.886 (22.5)
.022	MF1206EFR-P-.022-10-*	.433 (11.0)	1.26 (32.0)	.787 (20.0)	1.08 (27.5)
.027	MF1206EFR-P-.027-10-*	.433 (11.0)	1.26 (32.0)	.787 (20.0)	1.08 (27.5)
.033	MF1206EFR-Q-.033-10-*	.512 (13.0)	1.26 (32.0)	.866 (22.0)	1.08 (27.5)
.039	MF1206EFR-Q-.039-10-*	.512 (13.0)	1.26 (32.0)	.866 (22.0)	1.08 (27.5)

Cap.		1250 VDC / 400 VAC			
µF	Part #	T in. (mm)	L in. (mm)	H in. (mm)	S in. (mm)
.001	MF1206EFR-F-.001-1.25K-*	.197 (5.0)	.709 (18.0)	.433 (11.0)	.591 (15.0)
.0012	MF1206EFR-F-.0012-1.25K-*	.197 (5.0)	.709 (18.0)	.433 (11.0)	.591 (15.0)
.0015	MF1206EFR-G-.0015-1.25K-*	.236 (6.0)	.709 (18.0)	.472 (12.0)	.591 (15.0)
.0022	MF1206EFR-H-.0022-1.25K-*	.295 (7.5)	.709 (18.0)	.531 (13.5)	.591 (15.0)
.0027	MF1206EFR-J-.0027-1.25K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.0027	MF1206EFR-L-.0027-1.25K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.0033	MF1206EFR-J-.0033-1.25K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.0033	MF1206EFR-L-.0033-1.25K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.0039	MF1206EFR-J-.0039-1.25K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.0039	MF1206EFR-L-.0039-1.25K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.0047	MF1206EFR-J-.0047-1.25K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.0047	MF1206EFR-L-.0047-1.25K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.0056	MF1206EFR-K-.0056-1.25K-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.787 (20.0)
.0056	MF1206EFR-M-.0056-1.25K-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.886 (22.5)
.0068	MF1206EFR-N-.0068-1.25K-*	.335 (8.5)	1.04 (26.5)	.642 (16.3)	.886 (22.5)
.0082	MF1206EFR-N-.0082-1.25K-*	.335 (8.5)	1.04 (26.5)	.642 (16.3)	.886 (22.5)
.01	MF1206EFR-O-.01-1.25K-*	.394 (10.0)	1.04 (26.5)	.748 (19.0)	.886 (22.5)
.012	MF1206EFR-O-.012-1.25K-*	.394 (10.0)	1.04 (26.5)	.748 (19.0)	.886 (22.5)
.015	MF1206EFR-P-.015-1.25K-*	.433 (11.0)	1.26 (32.0)	.787 (20.0)	1.08 (27.5)
.018	MF1206EFR-P-.018-1.25K-*	.433 (11.0)	1.26 (32.0)	.787 (20.0)	1.08 (27.5)
.022	MF1206EFR-Q-.022-1.25K-*	.512 (13.0)	1.26 (32.0)	.866 (22.0)	1.08 (27.5)
.027	MF1206EFR-Q-.027-1.25K-*	.512 (13.0)	1.26 (32.0)	.866 (22.0)	1.08 (27.5)

Cap.		1600 VDC / 500 VAC			
µF	Part #	T in. (mm)	L in. (mm)	H in. (mm)	S in. (mm)
.001	MF1206EFR-G-.001-1.6K-*	.236 (6.0)	.709 (18.0)	.472 (12.0)	.591 (15.0)
.0012	MF1206EFR-G-.0012-1.6K-*	.236 (6.0)	.709 (18.0)	.472 (12.0)	.591 (15.0)
.0015	MF1206EFR-H-.0015-1.6K-*	.295 (7.5)	.709 (18.0)	.531 (13.5)	.591 (15.0)
.0022	MF1206EFR-J-.0022-1.6K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.0022	MF1206EFR-L-.0022-1.6K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.0027	MF1206EFR-J-.0027-1.6K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.0027	MF1206EFR-L-.0027-1.6K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.0033	MF1206EFR-J-.0033-1.6K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.0033	MF1206EFR-L-.0033-1.6K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.0039	MF1206EFR-K-.0039-1.6K-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.787 (20.0)
.0039	MF1206EFR-M-.0039-1.6K-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.886 (22.5)
.0047	MF1206EFR-K-.0047-1.6K-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.787 (20.0)
.0047	MF1206EFR-M-.0047-1.6K-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.886 (22.5)
.0056	MF1206EFR-N-.0056-1.6K-*	.335 (8.5)	1.04 (26.5)	.642 (16.3)	.886 (22.5)
.0068	MF1206EFR-N-.0068-1.6K-*	.335 (8.5)	1.04 (26.5)	.642 (16.3)	.886 (22.5)
.0082	MF1206EFR-O-.0082-1.6K-*	.394 (10.0)	1.04 (26.5)	.748 (19.0)	.886 (22.5)
.01	MF1206EFR-P-.01-1.6K-*	.433 (11.0)	1.26 (32.0)	.787 (20.0)	1.08 (27.5)
.012	MF1206EFR-P-.012-1.6K-*	.433 (11.0)	1.26 (32.0)	.787 (20.0)	1.08 (27.5)
.015	MF1206EFR-Q-.015-1.6K-*	.512 (13.0)	1.26 (32.0)	.866 (22.0)	1.08 (27.5)
.018	MF1206EFR-Q-.018-1.6K-*	.512 (13.0)	1.26 (32.0)	.866 (22.0)	1.08 (27.5)

Cap.		2000 VDC / 560 VAC			
µF	Part #	T in. (mm)	L in. (mm)	H in. (mm)	S in. (mm)
.001	MF1206EFR-J-.001-2.0K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.001	MF1206EFR-L-.001-2.0K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.0012	MF1206EFR-J-.0012-2.0K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.0012	MF1206EFR-L-.0012-2.0K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.0015	MF1206EFR-J-.0015-2.0K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.0015	MF1206EFR-L-.0015-2.0K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.0022	MF1206EFR-J-.0022-2.0K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.787 (20.0)
.0022	MF1206EFR-L-.0022-2.0K-*	.236 (6.0)	1.04 (26.5)	.591 (15.0)	.886 (22.5)
.0027	MF1206EFR-K-.0027-2.0K-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.787 (20.0)
.0027	MF1206EFR-M-.0027-2.0K-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.886 (22.5)
.0033	MF1206EFR-K-.0033-2.0K-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.787 (20.0)
.0033	MF1206EFR-M-.0033-2.0K-*	.276 (7.0)	1.04 (26.5)	.630 (16.0)	.886 (22.5)
.0039	MF1206EFR-N-.0039-2.0K-*	.335 (8.5)	1.04 (26.5)	.642 (16.3)	.886 (22.5)
.0047	MF1206EFR-N-.0047-2.0K-*	.335 (8.5)	1.04 (26.5)	.642 (16.3)	.886 (22.5)
.0056	MF1206EFR-N-.0056-2.0K-*	.335 (8.5)	1.04 (26.5)	.642 (16.3)	.886 (22.5)
.0068	MF1206EFR-O-.0068-2.0K-*	.394 (10.0)	1.04 (26.5)	.748 (19.0)	.886 (22.5)
.0082	MF1206EFR-O-.0082-2.0K-*	.394 (10.0)	1.04 (26.5)	.748 (19.0)	.886 (22.5)
.01	MF1206EFR-P-.01-2.0K-*	.433 (11.0)	1.26 (32.0)	.787 (20.0)	1.08 (27.5)
.012	MF1206EFR-P-.012-2.0K-*	.433 (11.0)	1.26 (32.0)	.787 (20.0)	1.08 (27.5)
.015	MF1206EFR-Q-.015-2.0K-*	.512 (13.0)	1.26 (32.0)	.866 (22.0)	1.08 (27.5)

\* - Please insert appropriate tolerance code