

# FPF

## Oval Leaded Polypropylene Film with Aluminum Foil Electrodes



### APPLICATIONS

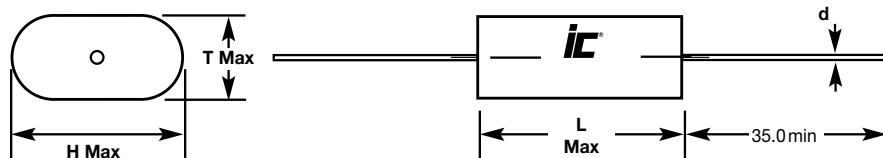
- IGBT Protection Circuits
- Snubber Networks
- Energy Conversion
- Switching Power Supplies

### FEATURES

- Polypropylene Film
- High  $dv/dt$
- High Current
- Low ESR

### SPECIFICATIONS

Operating Temperature Range		-40°C to +85°C								
Capacitance Tolerance		±10% at 1kHz, 25°C ±5% optional								
AC Voltage	WVDC	850	1000	1200	1600	2000	2500	3000		
	VAC	450	500	500	630	630	750	750		
Dissipation Factor $\tan \delta$ at 1 kHz and 25°C		0.05% Max.								
Insulation Resistance @25°C (<70% RH) for 1 minute at 500 VDC applied		C ≤ 0.33µF: 100000 MΩ C > 0.33µF: 30000 MΩ								
Self Inductance		<1 nano-Henry per mm of body length and lead length								
Dielectric Strength		Terminal to Terminal								
		160% of WVDC applied for 10 seconds and 25°C								
Construction		Extended Foil Polypropylene Film with internal series connections and metallized film								
Electrodes		Aluminum Foil								
Coating		Flame Retardant Polyester Tape Wrap with Epoxy End Fill (UL 94V-0)								
Lead Terminations		Lead free tinned copper leads								



Dimensions				
L	34	34	46	54
T	<18	≥18	<22	<22
d	1.0	1.2	1.2	1.2

# FPF

Oval Leaded  
Polypropylene Film with  
Aluminum Foil  
Electrodes

## PHYSICAL DIMENSIONS

WVDC (VAC) μF	850 (450)	1000 (500)	1200 (500)	1600 (630)	2000 (630)	2500 (750)	3000 (750)
0.015							34x15.5x8.5
0.022							34x18x10
0.033					34x14x8	34x16x9.2	34x18x10
0.047					34x16x9	34x17x10	46x19x12
0.068					34x18x11	34x19x12	46x21x14
0.1				34x19x13	34x20x14	34x21x15	46x24x15
0.15	34x16x10		34x16x9.5	34x21x16	46x23x14	46x24x15	46x27x18
0.22	34x18x12	34x18x12	34x19x12.5	34x25x18	46x27x16	54x27x18	
0.33	34x20x14	34x20x14	46x20.5x13.5	46x26x17	54x27x18	54x36x19	
0.47	34x27x17	34x27x17	46x25.5x19.5	46x28.5x21.5	54x35x22		
0.68	46x27x19	46x27x19	46x29x20.5	46x34x23.5			
1	46x33x22	46x33x22	54x36x26				
1.2	54x28x18	54x28x18	54x32x22				
1.5	54x36x22	54x36x21					

Convert to inches, divide by 25.4

LxHxT (mm)

\*Customized capacitors available upon request. Contact Illinois Capacitor Inc. for details.

## STANDARD PARTS LISTING

Capacitance (μF)	WVDC	IC PART NUMBER	dv/dt (v/μs)	Maximum RMS Current @100 kHz, +70°C in Amps	Typical ESR @100 kHz, +25°C in mΩ	Dimensions LxHxT (mm)
0.015	3000	153FPF302K	1500	3	35	34x15.5x8.5
0.022	3000	223FPF302K	1500	4.2	22	34x18x10
0.033	2000	333FPF202K	1200	4.8	19	34x14x8
0.033	2500	333FPF252K	1300	4.8	19	34x16x9.2
0.033	3000	333FPF302K	1500	6.1	12	34x18x12
0.047	2000	473FPF202K	1200	6.7	10	34x16x9
0.047	2500	473FPF252K	1300	6.5	10	34x17x10
0.047	3000	473FPF302K	1200	6.8	12	46x19x12
0.068	2000	683FPF202K	1200	7.9	8	34x18x11
0.068	2500	683FPF252K	1300	8.6	8	34x19x12
0.068	3000	683FPF302K	1200	7.9	10	46x21x14
0.1	1600	104FPF162K	1100	9	7	34x19x13
0.1	2000	104FPF202K	1200	9.5	6	34x20x14
0.1	2500	104FPF252K	1300	9.8	6	34x21x15
0.1	3000	104FPF302K	1200	9.3	8	46x24x15
0.15	850	154FPF850K	800	7.4	6	34x16x10
0.15	1200	154FPF122K	1000	9	6	34x16x9.5
0.15	1600	154FPF162K	1100	10	7	34x21x16
0.15	2000	154FPF202K	950	10	6	46x23x14
0.15	2500	154FPF252K	1050	10.9	6	46x24x15
0.15	3000	154FPF302K	1200	12	6	46x27x18
0.22	850	224FPF850K	800	8	6	34x18x12
0.22	1000	224FPF102K	800	8	6	34x18x12
0.22	1200	224FPF122K	1000	10.2	6	34x19x12.5
0.22	1600	224FPF162K	1100	12	7	34x25x18

Capacitance (μF)	WVDC	IC PART NUMBER	dv/dt (v/μs)	Maximum RMS Current @100 kHz, +70°C in Amps	Typical ESR @100 kHz, +25°C in mΩ	Dimensions LxHxT (mm)
0.22	2000	224FPF202K	950	11	6	46x27x16
0.22	2500	224FPF252K	950	11.2	6	54x27x18
0.33	850	334FPF850K	800	9.4	5	34x20x14
0.33	1000	334FPF102K	800	9.4	5	34x20x14
0.33	1200	334FPF122K	800	10.8	6	46x20.5x13.5
0.33	1600	334FPF162K	900	12	6	46x26x17
0.33	2000	334FPF202K	850	12.8	5	54x27x18
0.33	2500	334FPF252K	950	13.5	5	54x36x19
0.47	850	474FPF850K	800	11.7	5	34x27x17
0.47	1000	474FPF102K	800	11.7	5	34x27x17
0.47	1200	474FPF122K	800	11.7	5	46x25.5x19.5
0.47	1600	474FPF162K	900	13.8	6	46x28.5x21.5
0.47	2000	474FPF202K	850	15	5	54x35x22
0.68	850	684FPF850K	500	14.4	4	46x27x19
0.68	1000	684FPF102K	500	14.4	4	46x27x19
0.68	1200	684FPF122K	800	13.6	5	46x29x20.5
0.68	1600	684FPF162K	900	14.5	6	46x34x23.5
1	850	105FPF850K	500	13.8	3	46x33x22
1	1000	105FPF102K	500	13.8	3	46x33x22
1	1200	105FPF122K	700	16.2	4	54x36x26
1.2	850	125FPF850K	400	16.7	3	54x28x18
1.2	1000	125FPF102K	400	16.7	3	54x28x18
1.2	1200	125FPF122K	700	16.8	3	54x32x22
1.5	850	155FPF850K	400	20.3	2	54x36x22
1.5	1000	155FPF102K	400	20.3	2	54x36x22



3757 W. Touhy Ave., Lincolnwood, IL 60712 • (847) 675-1760 • Fax (847) 673-2850 • www.illcap.com