



### APPLICATIONS

- *Impregnated Elements Eliminate Corona*
- *IGBT Circuits*
- *Snubber Networks*
- *Energy Conversion*

### FEATURES

- *Impregnated Polypropylene*
- *High dv/dt*
- *Low Self Inductance*
- *Low ESR*

### SPECIFICATIONS

<b>Operating Temperature Range</b>		<b>-40°C to +85°C</b>				
<b>Capacitance Tolerance</b>		<b>+/- 10% at 1kHz, 20°C ±5 optional</b>				
<b>AC Voltage</b>	VDC	1000	1250	1500	2000	
	VAC	480	550	630	750	
<b>Dissipation Factor tan δ at 1 kHz and 20°C</b>		<b>0.05% Max.</b>				
<b>Insulation Resistance @20°C(&lt;70% RH) for 1 minute at 500VDC applied</b>		<b>C≤0.33μF: ≥100000 MΩ C&gt;0.33μF: ≥30000 MΩ</b>				
<b>Self inductance</b>		<b>&lt;1 nano-Henry per mm of lead spacing and lead length</b>				
<b>Dielectric Strength</b>		Terminal to Terminal		Terminal to Case		
		250% of VDC applied for 2 Seconds and 20°C		3kVAC at 50/60Hz applied between the terminals and case for 60 seconds and 20°C		
<b>Construction</b>		Impregnated Extended Foil Polypropylene Film				
<b>Electrode</b>		Aluminum Foil				
<b>Coating</b>		Flame Retardant Solvent Resistant Plastic Case with Epoxy Fill				
<b>Lead Terminations</b>		Lead Free Tinned Copper Leads				

## PHYSICAL DIMENSIONS

WVDC (μF) \ (VAC)	1000 (480)	1250 (550)	1500 (630)	2000 (750)
0.1	32x20x11	32x20x11	32x20x11	41.5x29x17
0.15	32x20x11	32x20x11	32x20x11	45x30x28
0.22	32x24x14 38x33x18 41.5x29x17	32x24x14 38x33x18 41.5x29x17	32x24x14 38x33x18 41.5x29x17	45x30x28
0.27	38x33x18 41.5x29x17	38x33x18 41.5x29x17	38x33x18 41.5x29x17	45x30x28
0.33	38x33x18 41.5x29x17	38x33x18 41.5x29x17	38x33x18 41.5x29x17	45x45x30
0.39	38x33x18 41.5x29x17	38x33x18 41.5x29x17	38x33x18 41.5x29x17	45x45x30
0.47	45x30x28	45x30x28	45x30x28	45x45x30
0.56	45x30x28	45x30x28	45x30x28	54x50x30
0.68	45x30x28	45x30x28	45x30x28	54x50x30
0.75	45x30x28 48x38x24	45x30x28 48x38x24	45x30x28 48x38x24	54x50x43
0.82	45x30x28	45x30x28	45x30x28	54x50x43
1	45x30x28 45x45x30	45x45x30 45x30x28	45x45x30	54x50x43
1.2	45x45x30	45x45x30	45x45x30	
1.5	45x45x30	45x45x30	45x45x30	
1.75	54x50x30	54x50x30	54x50x30	
2	54x50x30	54x50x30	54x50x30	
2.2	54x50x43	54x50x43	54x50x43	
2.5	54x50x43	54x50x43	54x50x43	
3	54x50x43	54x50x43	54x50x43	

Convert to inches, divide by 25.4

LxHxT (mm)

# FPL

Boxed Impregnated  
Polypropylene Film  
with Aluminum  
Foil Electrodes

## STANDARD PARTS LISTING

Capacitance (µF)	WVDC	IC <sup>®</sup> PART NUMBER	dv/dt (V/µs)	Maximum RMS Current @100kHz, 70°C in Amps	Typical ESR @100 kHz, +25°C in mΩ	Dimensions LxHxT (mm)
0.1	1000	104FPL102KK2##	900	5.6	11.2	32x20x11
0.1	1250	104FPL122KK2##	1000	5.6	11.2	32x20x11
0.1	1500	104FPL152KK2##	1100	5.6	11.2	32x20x11
0.1	2000	104FPL202KB1##	1300	13.2	8.4	41.5x29x17
0.15	1000	154FPL102KK2##	900	5.7	10.8	32x20x11
0.15	1250	154FPL122KK2##	1000	5.7	10.8	32x20x11
0.15	1500	154FPL152KK2##	1100	5.7	10.8	32x20x11
0.15	2000	154FPL202KB5##	1200	15.11	7	45x30x28
0.22	1000	224FPL102KB1##	900	18.2	4.2	41.5x29x17
0.22	1000	224FPL102KC1##	900	18.2	4.2	38x33x18
0.22	1000	224FPL102KA4##	900	6.8	10.4	32x24x14
0.22	1250	224FPL122KB1##	1000	18.2	4.2	41.5x29x17
0.22	1250	224FPL122KC1##	1000	18.2	4.2	38x33x18
0.22	1250	224FPL122KA4##	1000	6.8	10.4	32x24x14
0.22	1500	224FPL152KB1##	1100	18.2	4.2	41.5x29x17
0.22	1500	224FPL152KC1##	1100	18.2	4.2	38x33x18
0.22	1500	224FPL152KA4##	1100	6.8	10.4	32x24x14
0.22	2000	224FPL202KB5##	1200	19.8	4.5	45x30x28
0.27	1000	274FPL102KB1##	900	18.7	4	41.5x29x17
0.27	1000	274FPL102KC1##	900	18.7	4	38x33x18
0.27	1250	274FPL122KB1##	1000	18.7	4	41.5x29x17
0.27	1250	274FPL122KC1##	1000	18.7	4	38x33x18
0.27	1500	274FPL152KB1##	1100	18.7	4	41.5x29x17
0.27	1500	274FPL152KC1##	1100	18.7	4	38x33x18
0.27	2000	274FPL202KB5##	1200	21.7	4.3	45x30x28
0.33	1000	334FPL102KB1##	900	19.7	3.7	41.5x29x17
0.33	1000	334FPL102KC1##	900	19.7	3.7	38x33x18
0.33	1250	334FPL122KB1##	1000	19.7	3.7	41.5x29x17
0.33	1250	334FPL122KC1##	1000	19.7	3.7	38x33x18
0.33	1500	334FPL152KB1##	1100	19.7	3.7	41.5x29x17
0.33	1500	334FPL152KC1##	1100	19.7	3.7	38x33x18
0.33	2000	334FPL202KB3##	1200	22.2	4.1	45x45x30
0.39	1000	394FPL102KB1##	900	20.6	3.7	41.5x29x17
0.39	1000	394FPL102KC1##	900	20.6	3.5	38x33x18
0.39	1250	394FPL122KB1##	1000	20.6	3.7	41.5x29x17
0.39	1250	394FPL122KC1##	1000	20.6	3.5	38x33x18
0.39	1500	394FPL152KB1##	1100	20.6	3.7	41.5x29x17
0.39	1500	394FPL152KC1##	1100	20.6	3.5	38x33x18
0.39	2000	394FPL202KB3##	1200	22.5	4	45x45x30
0.47	1000	474FPL102KB5##	900	21.1	3.5	45x30x28
0.47	1250	474FPL122KB5##	1000	21.1	3.5	45x30x28
0.47	1500	474FPL152KB5##	1100	21.1	3.5	45x30x28
0.47	2000	474FPL202KB3##	1200	22.5	4	45x45x30
0.56	1000	564FPL102KB5##	800	21.3	3.5	45x30x28
0.56	1250	564FPL122KB5##	1000	21.3	3.5	45x30x28

Capacitance (µF)	WVDC	IC <sup>®</sup> PART NUMBER	dv/dt (V/µs)	Maximum RMS Current @100kHz, 70°C in Amps	Typical ESR @100 kHz, +25°C in mΩ	Dimensions LxHxT (mm)
0.56	1500	564FPL152KB5##	1000	21.3	3.5	45x30x28
0.56	2000	564FPL202KB4##	1000	22.7	3.8	54x50x30
0.68	1000	684FPL102KB5##	800	21.3	3.2	45x30x28
0.68	1250	684FPL122KB5##	900	21.3	3.2	45x30x28
0.68	1500	684FPL152KB5##	1000	21.3	3.2	45x30x28
0.68	2000	684FPL202KB4##	1000	22.8	3.7	54x50x30
0.75	1000	754FPL102KB2##	800	25.6	3	48x38x24
0.75	1000	754FPL102KB5##	800	25.6	3	45x30x28
0.75	1250	754FPL122KB2##	900	25.6	3	48x38x24
0.75	1250	754FPL122KB5##	900	25.6	3	45x30x28
0.75	1500	754FPL152KB2##	1000	25.6	3	48x38x24
0.75	1500	754FPL152KB5##	1000	25.6	3	45x30x28
0.75	2000	754FPL202KC2##	800	23.2	3.4	54x50x43
0.82	1000	824FPL102KB5##	800	26	3	45x30x28
0.82	1250	824FPL122KB5##	900	26	3	45x30x28
0.82	1500	824FPL152KB5##	1000	26	3	45x30x28
0.82	2000	824FPL202KC2##	800	23.2	3.3	54x50x43
1	1000	105FPL102KB3##	800	26	3	45x45x30
1	1000	105FPL102KB5##	900	26	3	45x30x28
1	1250	105FPL122KB3##	1000	26	3	45x45x30
1	1250	105FPL122KB5##	900	26	3	45x30x28
1	1500	105FPL152KB3##	1000	26	3	45x45x30
1	2000	105FPL202KC2##	800	23.2	3.2	54x50x43
1.2	1000	125FPL102KB3##	800	26	2.5	45x45x30
1.2	1250	125FPL122KB3##	900	26	2.5	45x45x30
1.2	1500	125FPL152KB3##	1000	26	2.5	45x45x30
1.5	1000	155FPL102KB3##	800	26	2.5	45x45x30
1.5	1250	155FPL122KB3##	900	26	2.5	45x45x30
1.5	1500	155FPL152KB3##	1000	26	2.5	45x45x30
1.75	1000	175FPL102KB4##	500	28	2.5	54x50x30
1.75	1250	175FPL122KB4##	600	28	2.5	54x50x30
1.75	1500	175FPL152KB4##	700	28	2.5	54x50x30
2	1000	205FPL102KB4##	500	28.2	2.5	54x50x30
2	1250	205FPL122KB4##	600	28.2	2.5	54x50x30
2	1500	205FPL152KB4##	700	28.2	2.5	54x50x30
2.2	1000	225FPL102KC2##	400	28.5	2.4	54x50x43
2.2	1250	225FPL122KC2##	500	28.5	2.4	54x50x43
2.2	1500	225FPL152KC2##	600	28.5	2.4	54x50x43
2.5	1000	255FPL102KC2##	400	29	2.2	54x50x43
2.5	1250	255FPL122KC2##	500	29	2.2	54x50x43
2.5	1500	255FPL152KC2##	600	29	2.2	54x50x43
3	1000	305FPL102KC2##	400	30	2	54x50x43
3	1250	305FPL122KC2##	500	30	2	54x50x43
3	1500	305FPL152KC2##	600	30	2	54x50x43



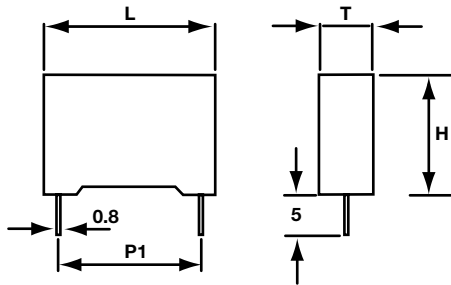
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## LEAD STYLES

Case code	L +/-1.0	H +/-1.0	T +/-1.0	P1 +/-0.5	P2	Terminal styles
K2	32	20	11	27.5		DL
K3	32	22	13	27.5		DL
K4	32	24	14	27.5		DL
B1	41.4	29	17	32.5,39		DL,FT,2P
B1	41.5	29	17	25.5	8.5	TL,RL,STL,SL
B1	41.5	29	17	25.5	11.5	MTL
B2	48	38	24	27	11.5	TL,RL,STL,SL
B2	48	38	24	39		FT
B2	48	38	24	27	13	MTL
B3	45	45	30	39		FT,2P
B3	45	45	30	27	11.5	ST,TL,RL,STL
B3	45	45	30	27	13	MTL
B4	54	50	30	27	11.5	TL,RL,STL,SL
B4	54	50	30	48		3P
B4	54	50	30	55	28	CL
B4	54	50	30	27	13	MTL
B5	45	30	28	27	11.5	TL,RL,STL,SL
B5	45	30	28	27	13.5	MTL
B5	45	30	28	39		FT,2P
C1	38	38	18			CR,CT,AB
C2	54	50	43	27	11.5	TL,RL,STL,SL
C2	54	50	43	27	13.5	MTL
C2	54	50	43	55	28	CL
C2	54	50	43	48		4P, CT

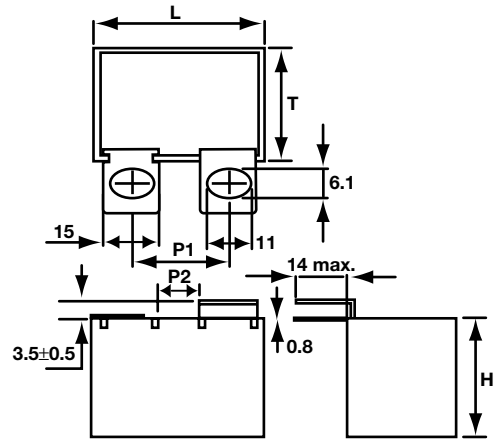
## DIMENSIONAL DETAILS AND TERMINAL OPTIONS

Terminal Style: DL



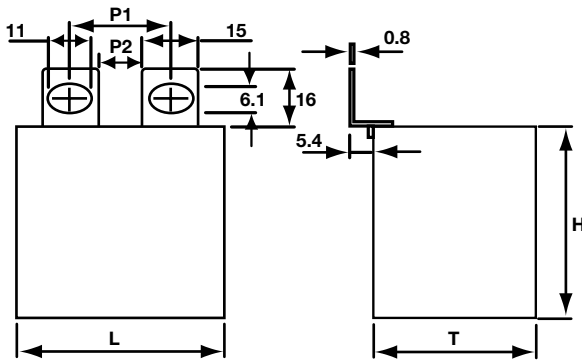
CASE CODE: K2, K3, K4  
FOR DETAILS SEE CASE CODE TABLE

Terminal Style: SL



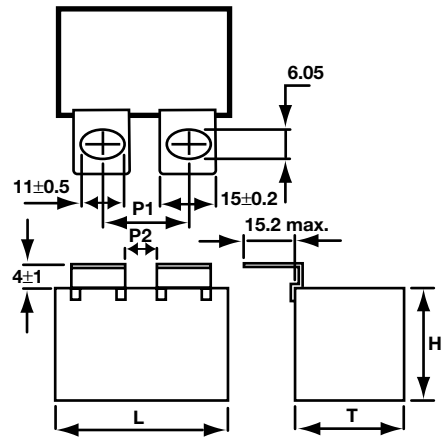
CASE CODE: B1, B2, B3, B4, B5, C2  
FOR DETAILS SEE CASE CODE TABLE

Terminal Style: TL



CASE CODE: B1, B2, B3, B4, B5, C2  
FOR DETAILS SEE CASE CODE TABLE

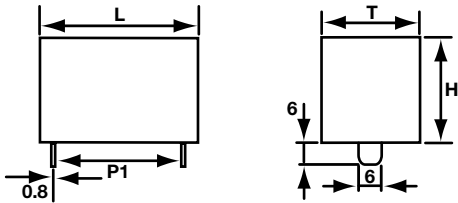
Terminal Style: RL



CASE CODE: B1, B2, B3, B4, B5, C2  
FOR DETAILS SEE CASE CODE TABLE

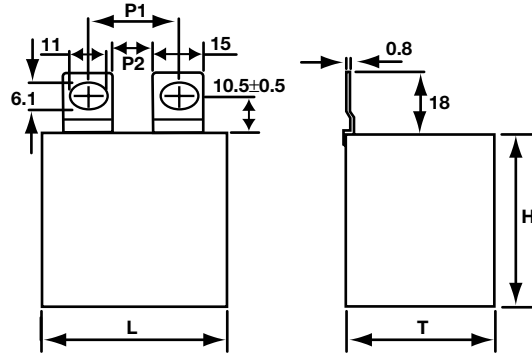
## DIMENSIONAL DETAILS AND TERMINAL OPTIONS

Terminal Style: FT



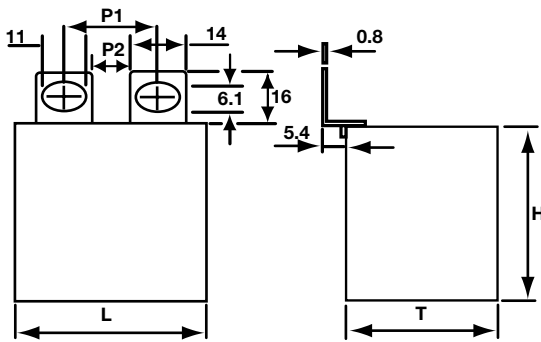
CASE CODE: B1, B2, B5  
FOR DETAILS SEE CASE CODE TABLE

Terminal Style: STL



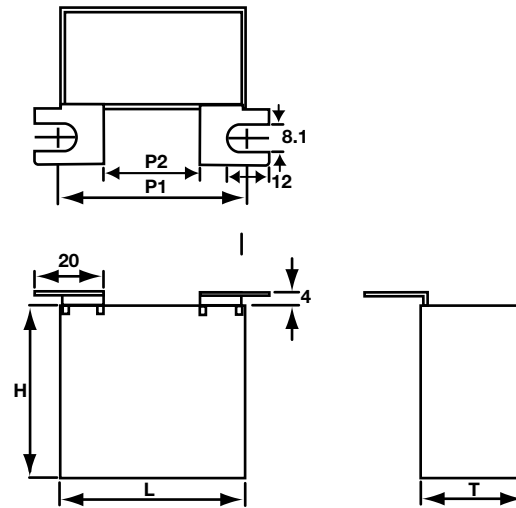
CASE CODE: B1, B2, B3, B4, B5, C2  
FOR DETAILS SEE CASE CODE TABLE

Terminal Style: MTL



CASE CODE: B1, B2, B3, B4, B5, C2  
FOR DETAILS SEE CASE CODE TABLE

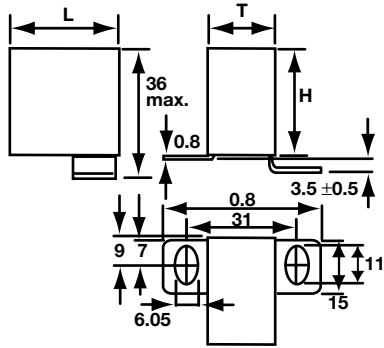
Terminal Style: CL



CASE CODE: B4, C2  
FOR DETAILS SEE CASE CODE TABLE

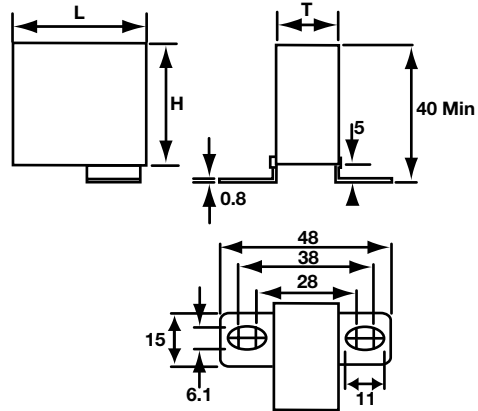
## DIMENSIONAL DETAILS AND TERMINAL OPTIONS

Terminal Style: CT

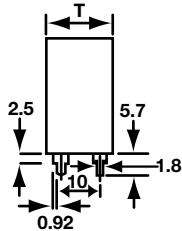


CASE CODE: C2  
FOR DETAILS SEE CASE CODE TABLE

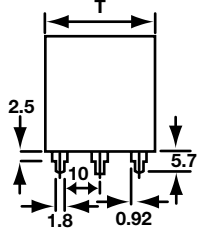
Terminal Style: CR



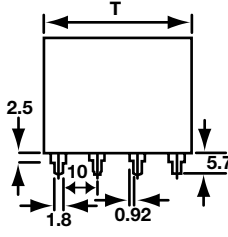
CASE CODE: C1  
FOR DETAILS SEE CASE CODE TABLE



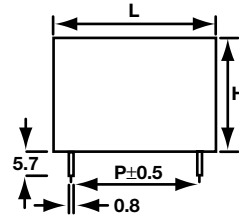
Terminal Style: 2P  
CASE CODE: B1, B2,  
B3, B5



Terminal Style: 3P  
CASE CODE: B4



Terminal Style: 4P  
CASE CODE: C2



FOR DETAILS SEE  
CASE CODE TABLE