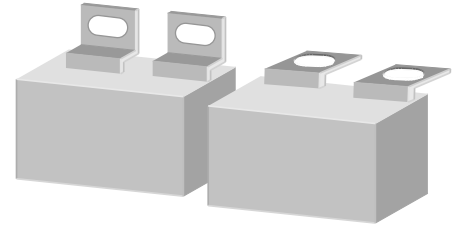


# KPF

- Self – healing property
- Low inductance
- High DV/DT
- Low ESR
- Low loss polypropylene dielectric

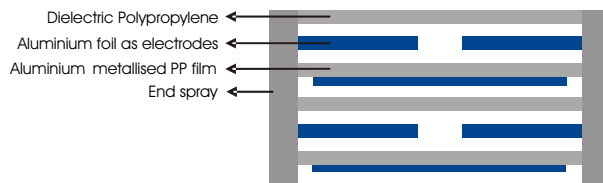


## TYPICAL APPLICATIONS

High voltage, high current and high pulse applications such as IGBT protection circuits, snubber networks, energy conversion and control in power electronics, protection circuits in SMPS

## CONSTRUCTION

KPF series capacitors utilize a hybrid element design of polypropylene film, aluminum foils and metallised polypropylene dielectric.

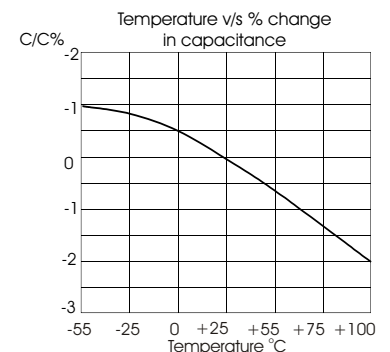
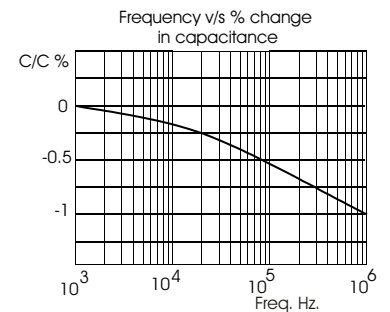
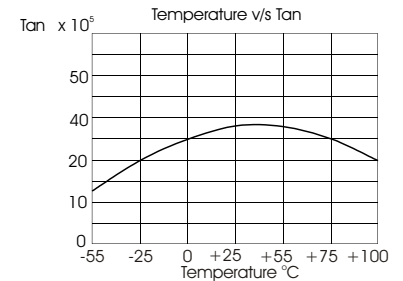
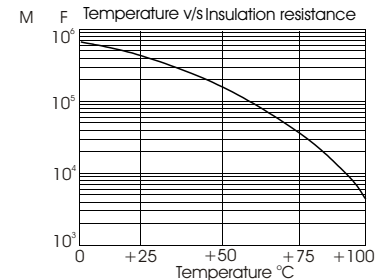
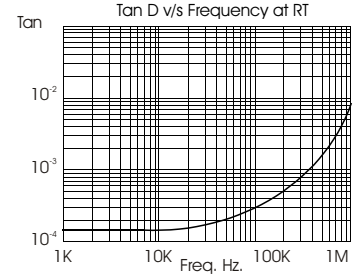


## TECHNICAL SPECIFICATIONS

Dielectric material	Polypropylene film
Electrode material	Aluminium foil and metallised plastic film
Winding construction	Non-inductive, extended foil
Lead material	Tinned copper
Enclosure	UL94VOPreformed plastic case with thermosetting resin fill.
Rated voltage VDC	1000 1250 1500 2000
Rated voltage VAC	480 550 630 750
Capacitance range	0.1 F to 3.3 F
Capacitance Tol.	±5%(J); ±10%(K)
Test voltage	Between terminals 1.6 x rated voltage VDC for 2sec. Terminal to case 3KVAC at 50 Hz for 60 sec.
Temperature range	-40°C to +85°C
Insulation resistance	Measured at +25°C, 500VDC, 60 S C ≤ 0.33 F : ≥ 100,000M C > 0.33 F : ≥ 30,000 M
Dissipation factor Tan	≤ 0.0005 at 1 KHz and 25°C

## MARKING ON CAPACITOR

Alcon logo & name; Capacitor type ( KPF); Capacitance value and tolerance; voltage rating and manufacturing date code



## WORKING VOLTAGE 1000 VDC (480 VAC AT 50 HZ)

Rated Capacitance mfd	Case Code	DV/DT V/ $\mu$ S	I <sub>peak</sub> A	I <sub>rms</sub> at 100Khz	ESR at 100 Khz	Available Terminal styles
0.10	K2	1200	120	5.6	11.2	DL
0.15	K2	1200	180	5.7	10.8	DL
0.22	K3	1200	264	6.8	10.4	DL
0.22	B1, C1	1200	264	18.2	4.2	TL,RL, CR,CT,STL, FT, SL, MTL,TP
0.27	B1, C1	1000	270	18.7	4	TL,RL, CR, CT, STL, FT, SL, MTL,TP
0.33	B5, C1	1000	330	19.7	3.7	TL,RL, CR, CT, STL, FT, SL, MTL,TP
0.39	B5, C1	1000	390	20.6	3.7	TL,RL, CR, CT, STL, FT, SL, MTL,TP
0.47	B5	1000	470	21.1	3.5	TL,RL, SL ,STL, FT, MTL,TP
0.56	B5	900	504	21.3	3.5	TL,RL,SL, STL, FT, MTL,TP
0.68	B5	900	612	21.3	3.5	TL,RL,SL ,STL, FT, MTL,TP
0.75	B5	900	675	25.6	3.2	TL,RL, STL, FT, SL, MTL,TP
0.82	B3	900	738	26	3	TL,RL, STL, SL, MTL,TP
1.00	B3	900	900	26	3	TL,RL, STL, SL, MTL,TP
1.20	B3	900	1080	26	2.5	TL,RL, STL, SL, MTL,TP
1.50	B4	600	900	26	2.5	TL,RL, STL, SL, MTL,AD
1.75	B4	600	1050	28	2.5	TL,RL, STL, SL, MTL,AD
2.00	B4	600	1200	28.2	2.5	TL,RL, STL, SL, MTL,AD
2.20	C2	600	1320	28.5	2.4	TL,RL, STL, SL, MTL,AD
2.50	C2	600	1500	29	2.2	TL,RL, STL, SL, MTL,AD
3	C2	600	1800	30	2	TL,RL, STL, SL, MTL,AD
3.30	C2	600	1980	30	2	TL,RL, STL, SL, MTL,AD

## WORKING VOLTAGE 1250 VDC (550VAC AT 50 HZ)

Rated Capacitance mfd	Case Code	DV/DT V/ $\mu$ S	I <sub>peak</sub> A	I <sub>rms</sub> at 100Khz	ESR at 100 Khz	Available Terminal styles
0.10	K2	1400	140	5.6	11.2	DL
0.15	K2	1400	210	5.7	10.8	DL
0.22	K3	1400	308	6.8	10.4	DL
0.22	B1, C1	1400	308	18.2	4.2	TL,RL, CR,CT,STL, FT, SL, MTL,TP
0.27	B1, C1	1200	324	18.7	4	TL,RL, CR,CT,STL, FT, SL, MTL,TP
0.33	B5, C1	1200	396	19.7	3.7	TL,RL, CR,CT,STL, FT, SL, MTL,TP
0.39	B5, C1	1200	468	20.6	3.7	TL,RL, CR,CT,STL, FT, SL, MTL,TP
0.47	B5	1200	564	21.1	3.5	TL,RL, SL ,STL, FT, MTL,TP
0.56	B5	1100	616	21.3	3.5	TL,RL, SL ,STL, FT, MTL,TP
0.68	B5	1100	748	21.3	3.5	TL,RL, SL ,STL, FT, MTL,TP
0.75	B3	1100	825	25.6	3.2	TL,RL, SL ,STL, FT, MTL,TP
0.82	B3	1100	902	26	3	TL,RL, SL ,STL, FT, MTL,TP
1.00	B3	1100	1100	26	3	TL,RL, SL ,STL, MTL,TP
1.20	B4	800	960	26	2.5	TL,RL, SL ,STL, MTL,TP
1.50	B4	800	1200	26	2.5	TL,RL, SL ,STL, MTL,TP
1.75	B4	800	1400	28	2.5	TL,RL, STL, SL, MTL,AD
2.00	C2	800	1600	28.2	2.5	TL,RL, STL, SL, MTL,AD
2.20	C2	800	1760	28.5	2.4	TL,RL, STL, SL, MTL,AD
2.5	C2	800	2000	29	2.2	TL,RL, STL, SL, MTL,AD

## WORKING VOLTAGE 1500 VDC (630VAC AT 50 HZ)

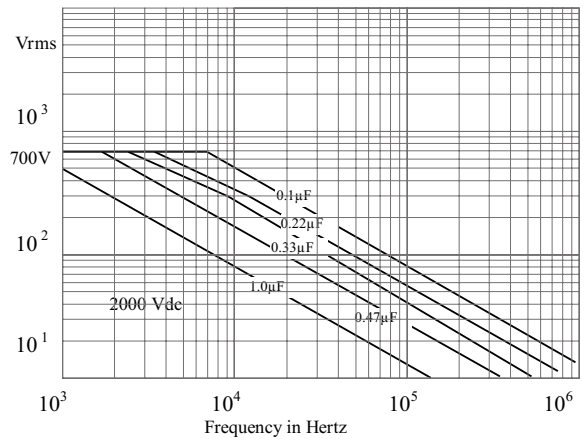
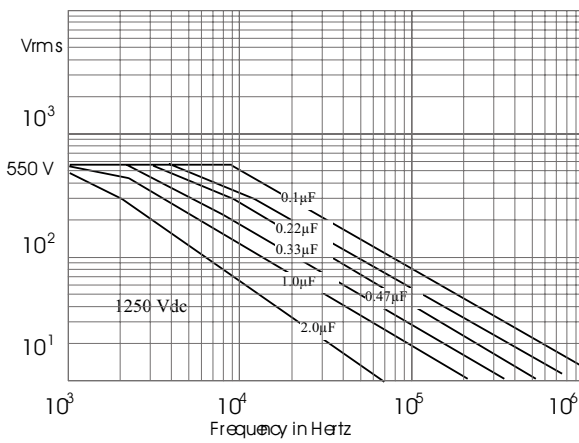
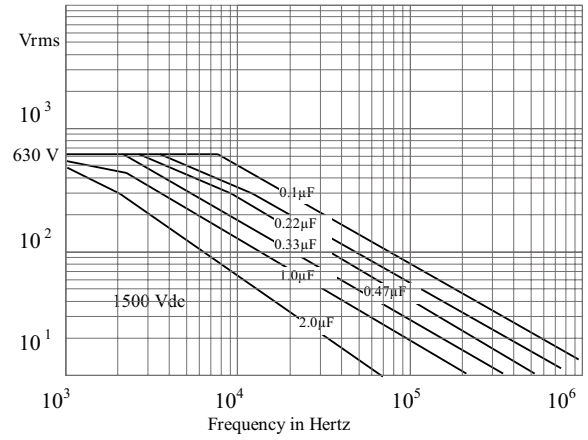
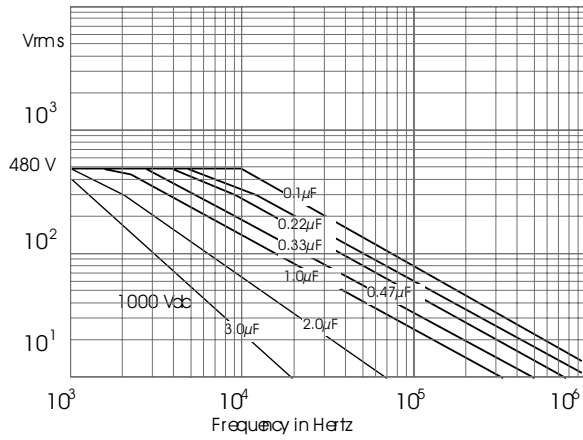
Rated Capacitance mfd	Case Code	DV/DT V/ $\mu$ S	Ipeak A	Irms at 100Khz	ESR at 100 Khz	Available Terminal styles
0.1	K2	1600	160	5.6	11.2	DL
0.15	K2	1600	240	5.7	10.8	DL
0.22	K3	1600	352	6.8	10.4	DL
0.22	B1, C1	1600	352	18.2	4.2	TL,RL, CR,CT,STL, FT, SL, MTL,TP
0.27	B1, C1	1400	378	18.7	4	TL,RL, CR,CT,STL, FT, SL, MTL,TP
0.33	B5, C1	1400	462	19.7	3.7	TL,RL, CR,CT,STL, FT, SL, MTL,TP
0.39	B5, C1	1400	546	20.6	3.7	TL,RL, CR,CT,STL, FT, SL, MTL,TP
0.47	B5	1400	658	21.1	3.5	TL,RL, SL ,STL, FT,MTL,TP
0.56	B5	1300	728	21.3	3.5	TL,RL, SL ,STL, FT,MTL,TP
0.68	B3	1300	884	21.3	3.5	TL,RL, SL ,STL,MTL,TP
0.75	B3	1300	975	25.6	3.2	TL,RL, SL ,STL,MTL,TP
0.82	B3	1300	1066	26	3	TL,RL, SL ,STL,MTL,TP
1	B4	1300	1300	26	3	TL,RL, SL ,STL,MTL,TP
1.2	C2	1300	1560	26	2.5	TL,RL, SL ,STL, MTL,TP
1.5	C2	1300	1950	26	2.5	TL,RL, SL ,STL, MTL,TP
1.75	C2	1000	1750	28	2.5	TL,RL, SL ,STL,MTL,AD
2	C2	1000	2000	28.2	2.5	TL,RL, SL ,STL, FT,AD

## WORKING VOLTAGE 2000 VDC (700VAC AT 50 HZ)

Rated Capacitance mfd	Case Code	DV/DT V/ $\mu$ S	Ipeak A	Irms at 100Khz	ESR at 100 Khz	Available Terminal styles
0.1	B1	1900	190	13.2	8.4	TL,RL, SL ,STL, FT, MTL,TP
0.15	B5	1900	285	15.11	7	TL,RL, SL ,STL, FT, MTL,TP
0.22	B5	1900	418	19.8	4.5	TL,RL, SL ,STL, FT, MTL,TP
0.27	B5	1900	513	21.7	4.3	TL,RL, SL ,STL, FT, MTL,TP
0.33	B3	1700	561	22.2	4.1	TL,RL, SL ,STL, MTL,TP
0.39	B3	1700	663	22.5	4	TL,RL, SL ,STL, MTL,TP
0.47	B3	1700	799	22.5	4	TL,RL, SL ,STL, MTL,TP
0.56	B4	1600	896	22.7	3.8	TL,RL, SL ,STL, MTL,AD
0.68	B4	1600	1088	22.8	3.7	TL,RL, SL ,STL,MTL,AD
0.75	C2	1500	1125	23.2	3.4	TL,RL, SL ,STL, MTL,AD
0.82	C2	1500	1230	23.2	3.3	TL,RL, SL ,STL, MTL,AD
1	C2	1500	1500	23.3	3.2	TL,RL, SL ,STL, MTL,AD

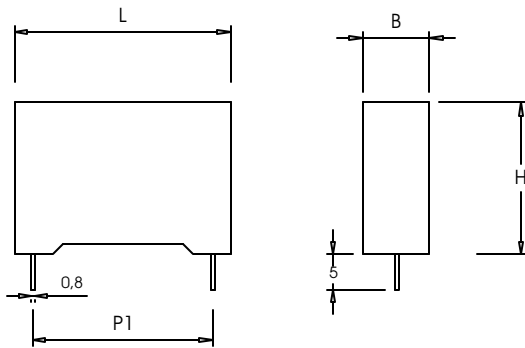
## FREQUENCY DERATING

AC voltage derating with respect to frequency at 10°C (General reference)



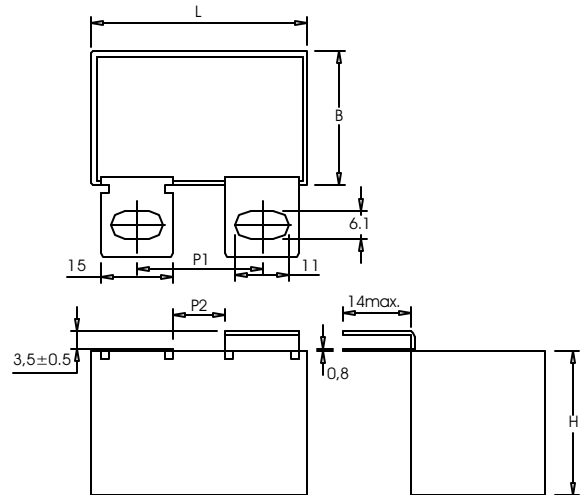
## DIMENSIONAL DETAILS AND TERMINAL OPTIONS

Terminal style : DL



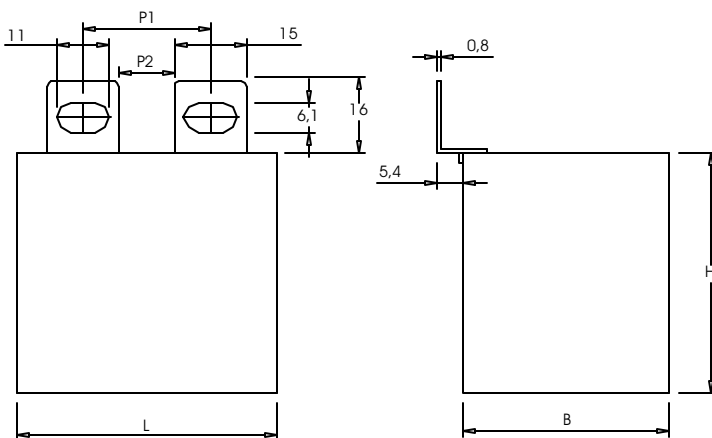
CASE CODE : K2, K3, K4  
FOR DETAILS SEE CASE CODE TABLE

Terminal style : SL



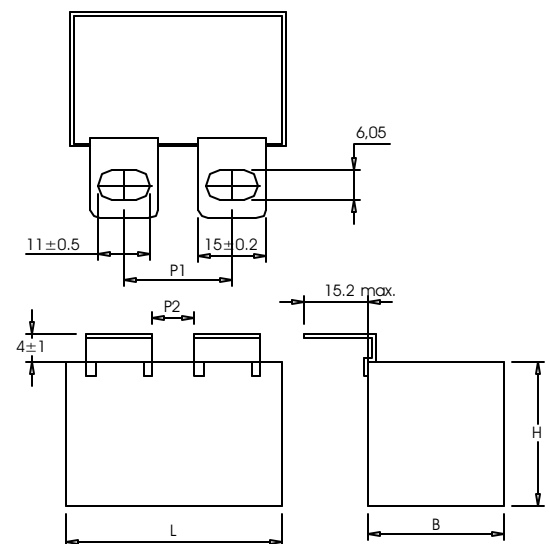
CASE CODE : B1, B2, B3, B4, B5, C2  
FOR DETAILS SEE CASE CODE TABLE

Terminal style : TL



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

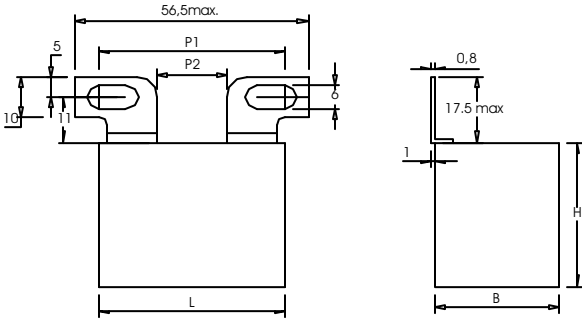
Terminal style : RL



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

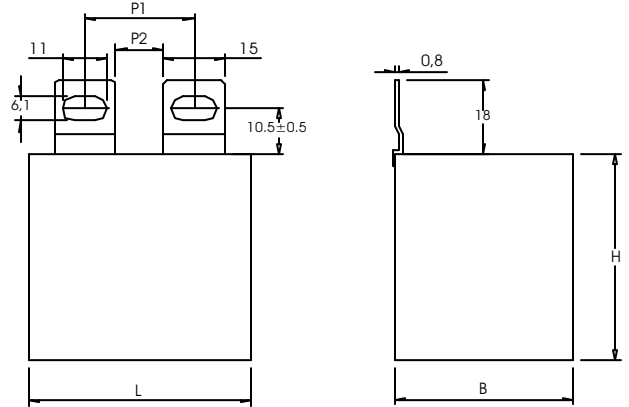
## DIMENSIONAL DETAILS AND TERMINAL OPTIONS

Terminal style : TP



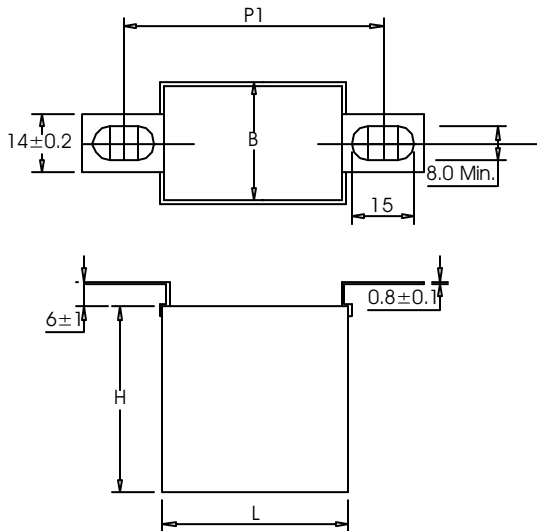
CASE CODE : B1,B2,B3,B5,  
FOR DETAILS SEE CASE CODE TABLE

Terminal style : STL



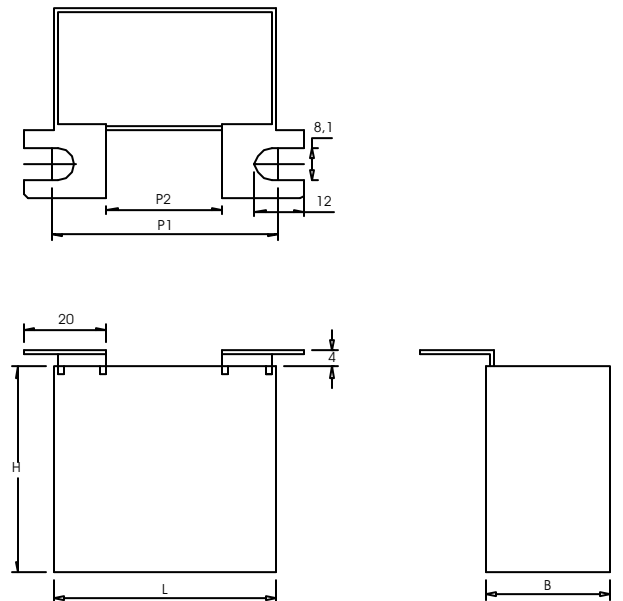
CASE CODE : B1,B2,B3,B4,B5,C2  
FOR DETAILS SEE CASE CODE TABLE

Terminal style : AD



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

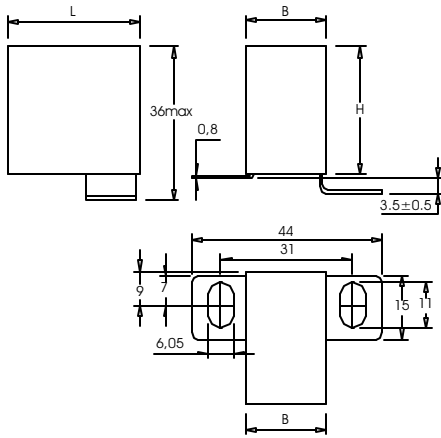
Terminal style : CL



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

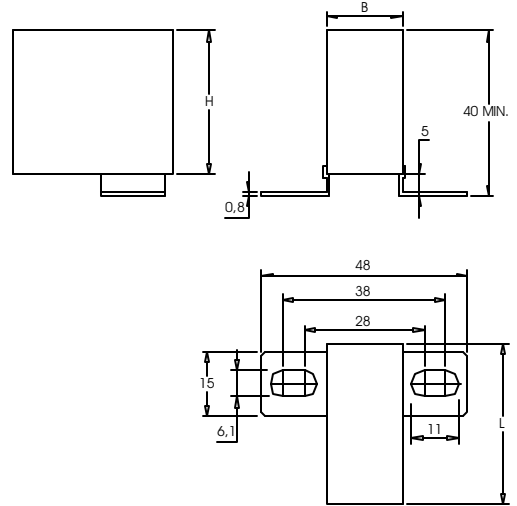
## DIMENSIONAL DETAILS AND TERMINAL OPTIONS

Terminal style : CT



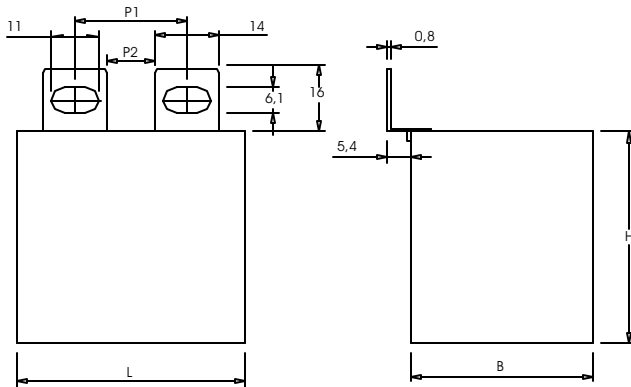
CASE CODE : C1  
FOR DETAILS SEE CASE CODE TABLE

Terminal style : CR



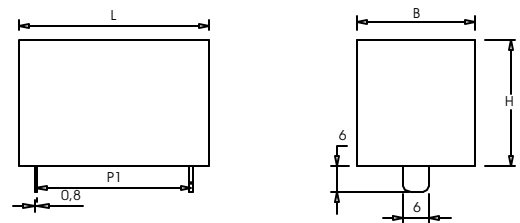
CASE CODE : C1  
FOR DETAILS SEE CASE CODE TABLE

Terminal style : MTL



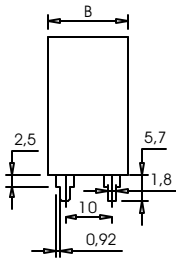
CASE CODE : B1,B2,B3,B4,B5,C2  
FOR DETAILS SEE CASE CODE TABLE

Terminal style : FT

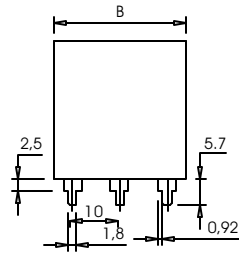


CASE CODE : B1,B2,B5  
FOR DETAILS SEE CASE CODE TABLE

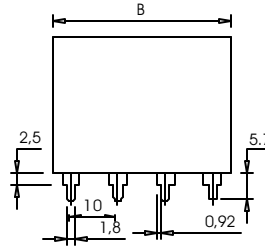
## DIMENSIONAL DETAILS AND TERMINAL OPTIONS



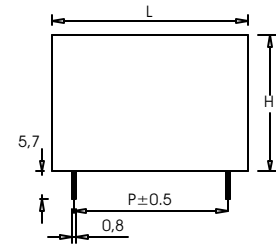
Terminal style : 2P  
CASE CODE : B2,B3,B5  
FOR DETAILS SEE CASE CODE TABLE



Terminal style : 3P  
CASE CODE : B4  
FOR DETAILS SEE CASE CODE TABLE



Terminal style : 4P  
CASE CODE : C2  
FOR DETAILS SEE CASE CODE TABLE



### CASE SIZE in mm

Case code	SIZE			P1	P2	Terminal style
	B	H	L			
K2	11	20	32	27.5		DL
K3	13	22	32	27.5		DL
K4	14	24	32	27.5		DL
B1	17	29	41.5	37.5		FT,2P
B1	17	29	41.5	25.5	8.5	TL,RL,STL,SL
B1	17	29	41.5	32 to 45	17.0	TP
B1	17	29	41.5	25.5	11.5	MTL
B2	24	38	48	27.0	11.5	TL,RL,STL,SL
B2	24	38	48	25.5	11.5	MTL
B2	24	38	48	32 to 45	17.0	TP
B2	24	38	48	37.5		FT,2P
B3	30	45	45	27.0	11.5	TL,RL,STL,SL
B3	30	45	45	32 to 45	17.0	TP
B3	30	45	45	37.5		FT,2P,3P
B3	30	45	45	27.0	13.0	MTL
B4	30	50	54	27.0	11.5	TL,RL,STL,SL
B4	30	50	54	27.0	13.0	MTL
B4	30	50	54	48.0		3P
B4	30	50	54	62 to 75		AD
B4	30	50	54	55.0	28.0	CL
B5	28	30	45	27.0	11.5	TL,RL,STL,SL
B5	28	30	45	37.5		FT,2P,3P
B5	28	30	45	32 to 45	17.0	TP
B5	28	30	45	27.0	13.0	MTL
C2	43	50	54	27.0	11.5	TL,RL,STL,SL
C2	43	50	54	27.0	13.0	MTL
C2	43	50	54	62 to 75		AD
C2	43	50	54	55.0	28.0	CL
C2	43	50	54	48.0		4P
C1	18	33	38			CR,CT



A6765 ISO 9001



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