

# Versions of S.M. I.G.B.T Snubber capacitors - ISO-9001 certified

## Versions of S.M Snubber Capacitors

# MPF High performance Insulated Gate Bipolar Transistor IGBT-snubber capacitors

### Technical Data

- 01.Dielectric: Polypropylene film.
- 02.Encapsulation: Flame-retardent plastic case, UL 94 V-0,
- 03.With epoxy resin seal: Black.
- 04.Temperature range: 25°C to +100°C
- 05.Capacitance range: 1.0 ~ 60.0 μ F.
- 06.Rated working voltage range: 250V, 400V, 630V, 1200V, 1600V DC.
- 07.Test category: 25/100/21 in accordance with IEC
- 08.DAMP-HEAT TEST: Capacitor are subjected to an environmental test chamber at R.H. 90 to 95 %, operating temperatures for 240 hours.  
After the test, capacitor shall be conditioned at room temperature for 2 hours and meet the following criteria

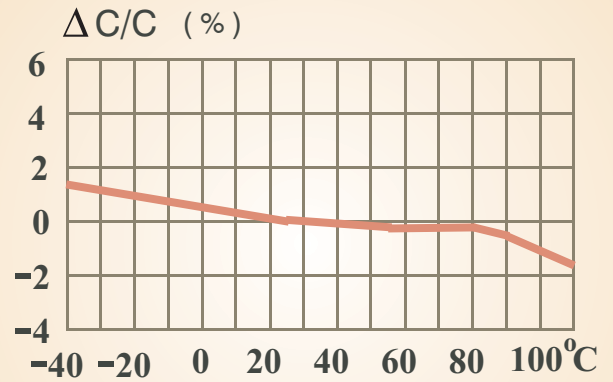
- ( A ) Capacitance change shall be less than 3 %.
- ( B ) Dissipation factor shall be less than 0.2 %.
- ( C ) Insulation resistance shall be over 50 % of the minimum requirement.
- 09.Insulation resistance ( IR ) at +25°C: Measurement shall be mad at 25°C after applyingfor for 60 Sec, at 1000VDC, Above 20,000 Ω F.
- 10.Dissipations factors at +25°C ( tan θ ): 0.1 % MAX. When measured at 1 KHZ.
- 11.Capacitance tolerances: ± 5 %.
- 12.Test voltage: 2.5 Ur, 2 sec.
- 13.PULL TEST: Will sustain 2 Kg steady pull in the direction of lead egress and 1 Kg steady pull at any 90 degree angle for 60 seconds. After test, capacitor shall show no evidence of damage and pass all electrical requirements.

Capacitance μF	250VDC			400VDC			630VDC			1200VDC			1600VDC		
	T	H	L	T	H	L	T	H	L	T	H	L	T	H	L
0.22													15.5	28.0	38.0
0.33										15.5	28.0	38.0	17.5	29.5	38.0
0.47										17.0	29.0	38.0	20.5	30.0	38.0
0.68										20.5	30.0	38.0	22.0	35.5	38.0
1.0							14.0	24.5	38.0	24.5	35.5	38.0	27.0	39.0	45.5
1.5				12.5	23.5	38	15.5	28.0	38.0	27.0	39.0	45.5	28.0	39.0	60.0
2.0				14.0	24.5	38	19.5	29.5	38.0	28.0	39.0	60.0	28.0	39.0	60.0
2.2				15.5	28.0	38	19.5	29.5	38.0	28.0	39.0	60.0	33.5	48.0	60.0
3.0				17.5	29.5	38	22.0	34.5	38.0	33.5	48.0	60.0	38.5	54.0	60.0
3.3				17.5	29.5	38	24.5	35.5	38.0	33.5	48.0	60.0	38.5	54.0	60.0
4.0	12.5	23.5	38.0	19.5	29.5	38	24.5	35.5	38.0	38.5	54.0	60.0			
4.7	14.0	24.5	38.0	20.5	30.0	38	24.5	37.0	45.5	38.5	54.0	60.0			
6.8	15.5	28.0	38.0	24.5	35.5	38	28.0	39.0	60.0						
10.0	19.5	29.5	38.0	27.0	39.0	45.5	33.5	48.0	60.0						
15.0	22.0	35.0	38.0	28.0	39.0	60	38.5	54.0	60.0						
22.0	27.0	39.0	45.5	38.5	54.0	60									
33.0	28.0	39.0	60.0												
40.0	33.5	48.0	60.0												
47.0	33.5	48.0	60.0												
60.0	38.5	54.0	60.0												

● Dims. in mm. ● On ordering please state the required version and box size. ● Versions and dimensional drawings see D/N.

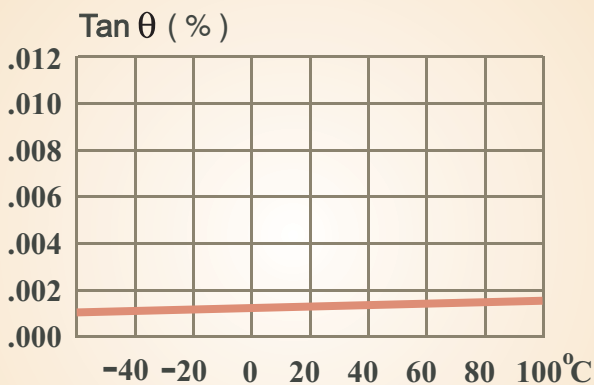
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Versions of S.M snubber capacitors  
 Typical graphs of the polypropylene dielectric

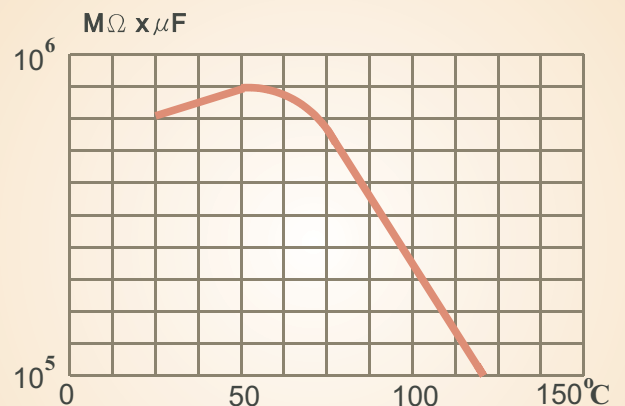


Capacitance change with temperature  
 (f=1 kHz) (general guide)

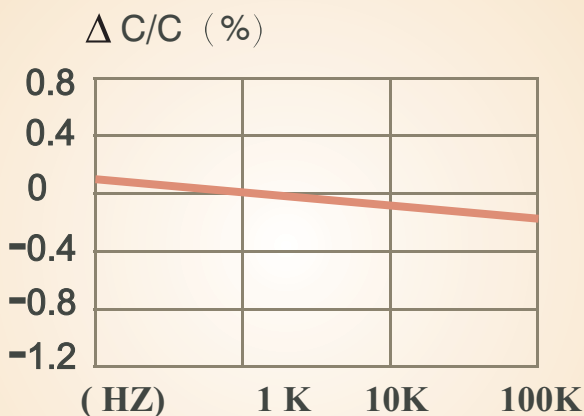
Chart



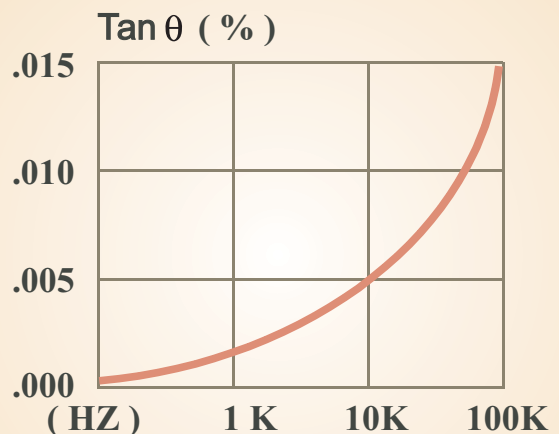
Dissipation factor change with temperature  
 (general guide)



Insulation resistance change with temperature  
 (general guide)



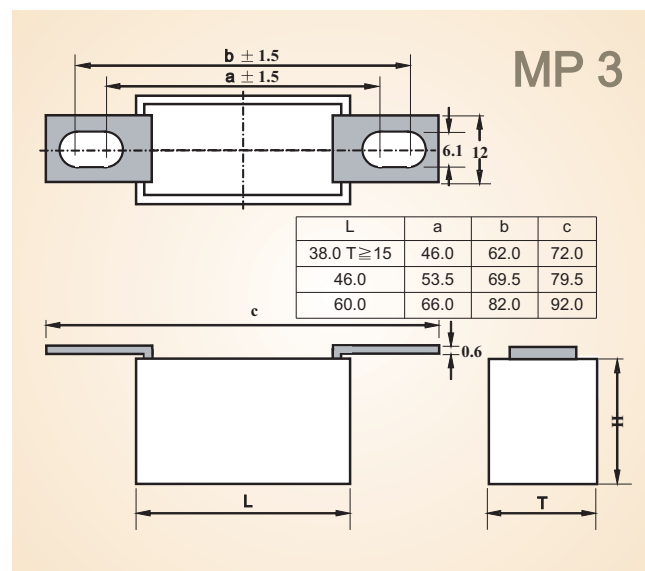
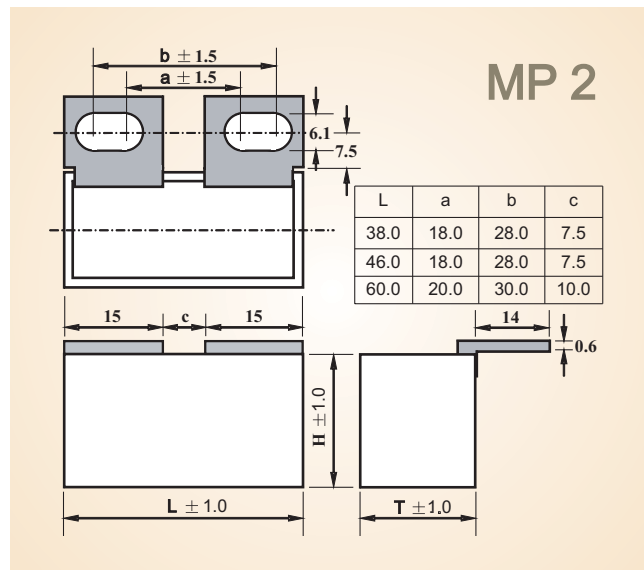
Capacitance change with frequency  
 (general guide)



Dissipation factor change with frequency  
 (general guide)



Versions of S.M  
snubber capacitors  
drawing



Diagram

