ShinDengen

ST70-27MF

TVS

180A, 7000W

Feature

- Optimized for Multiple Protection Purposes
  [ESD],[Lighting Surge],[Automotove Transient Surge]
- Peak pulse power:7000W
- High Speed
- SMD
- Available for automotive use
- Pb free terminals
- RoHS_Yes

OUTLINE

Package (House Name): MCP

Equivalent circuit

Absolute Maximum Ratings (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	Tstg		-40 to 150	°C
Operating junction temperature	Tj		150	°C
Maximum surge reverse current	I_{RSM}	10/1000µs, Non-repetitive ※	180	A
Maximum surge reverse current	I_{RSM}	10/10000µs, Non-repetitive	100	A
Maximum surge reverse power	P_{RSM}	10/1000µs, Non-repetitive	7000	W
Maximum surge reverse power	P_{RSM}	10/10000µs, Non-repetitive	3500	W
Continuous (direct) reverse voltage	$V_{R(DC)}$		23	V
Power dissipation	P		5	W

※ ：See the original Specifications

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Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage	V_{BR}	IR=1mA	24.3		29.7	V
Reverse current	I_R	VR=23V, Pulse measurement			5	μA
Thermal resistance	Rth(j-l)	Junction to lead, On glass-epoxy substrate			5	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate			45	°C/W
Forward voltage	V_F	IF=30A, Pulse Measurement			1.3	V
Temperature coefficient	rz				0.09	%/°C

※ ：See the original Specifications

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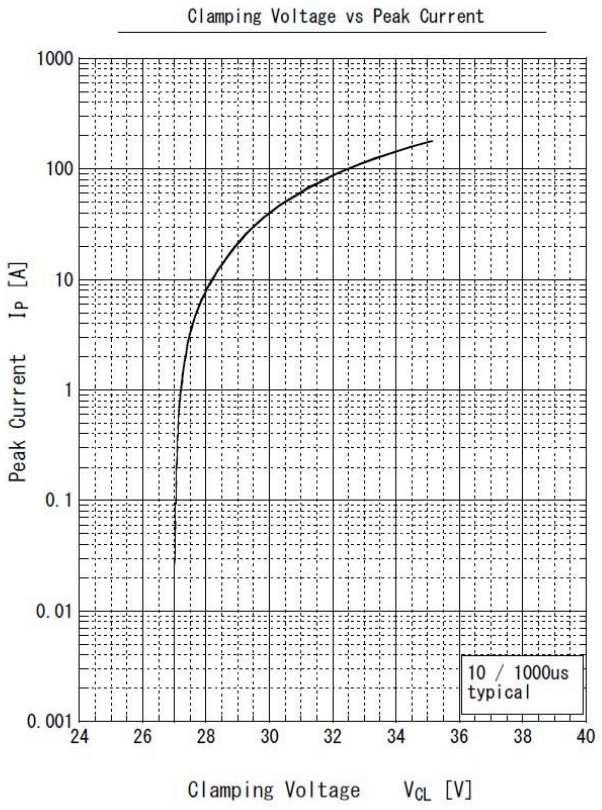
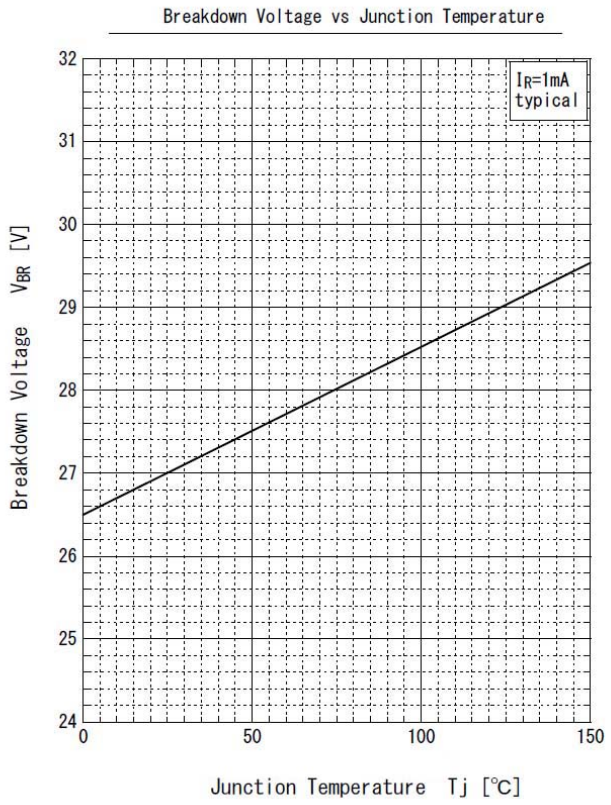
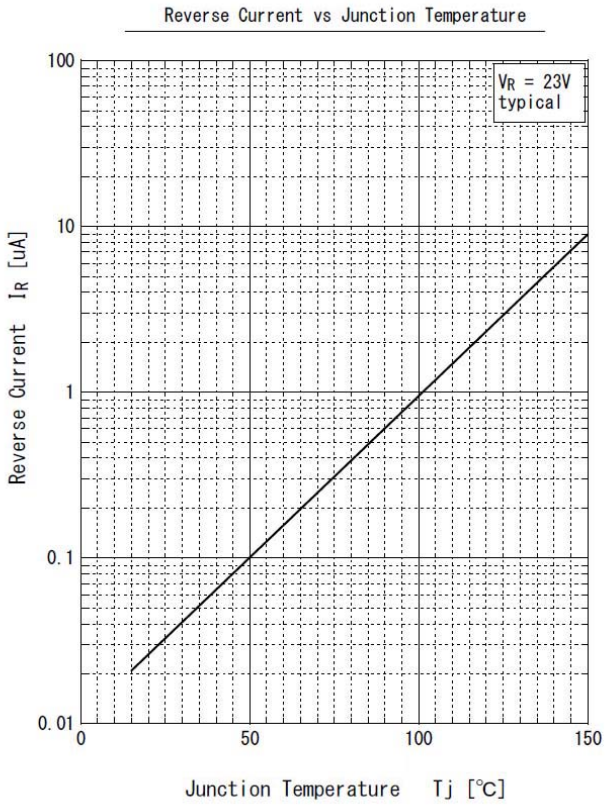
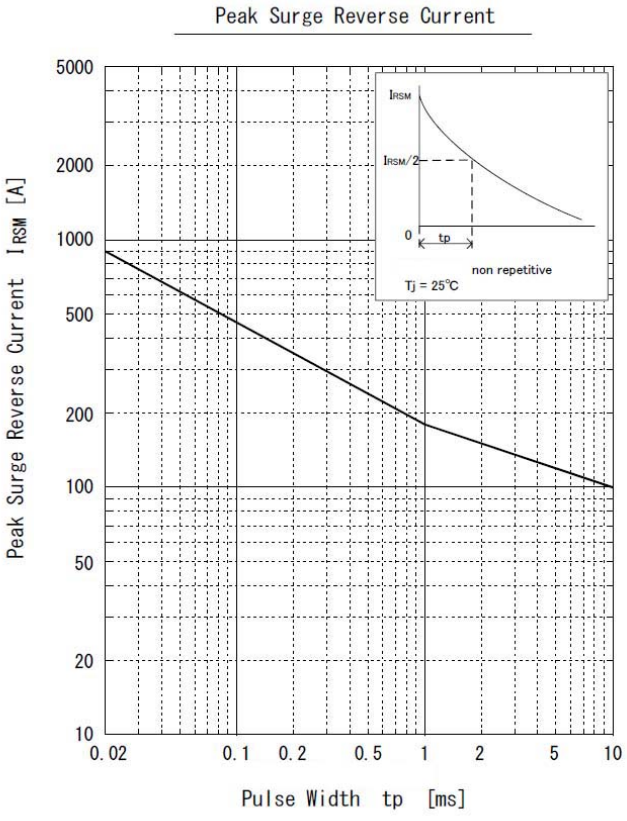
CHARACTERISTIC DIAGRAMS









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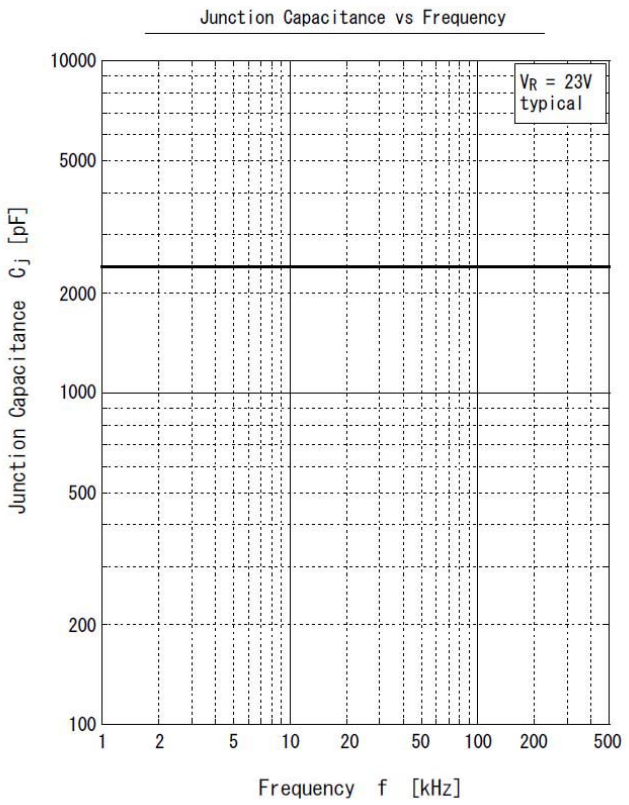

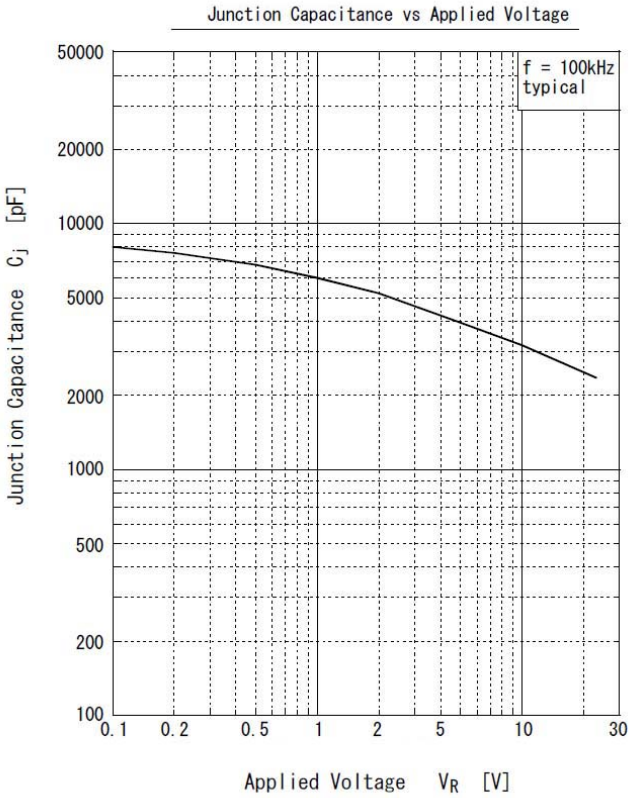

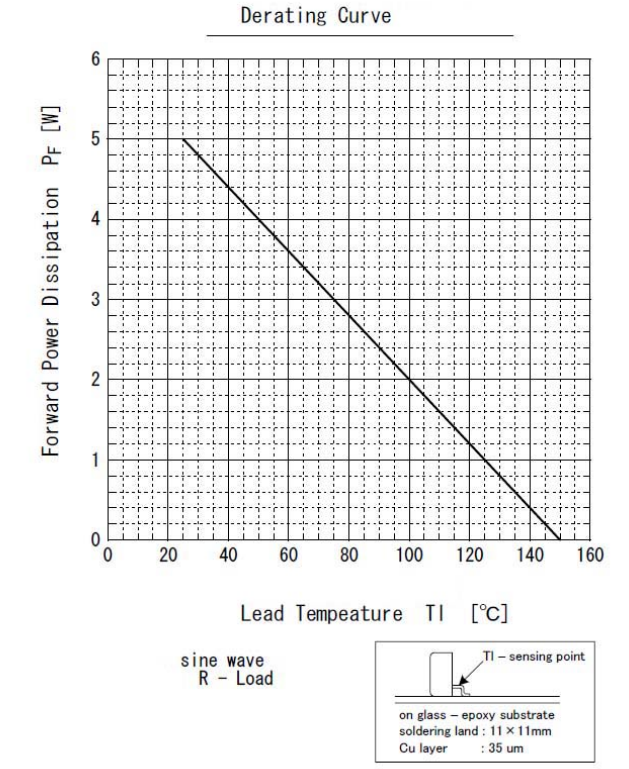

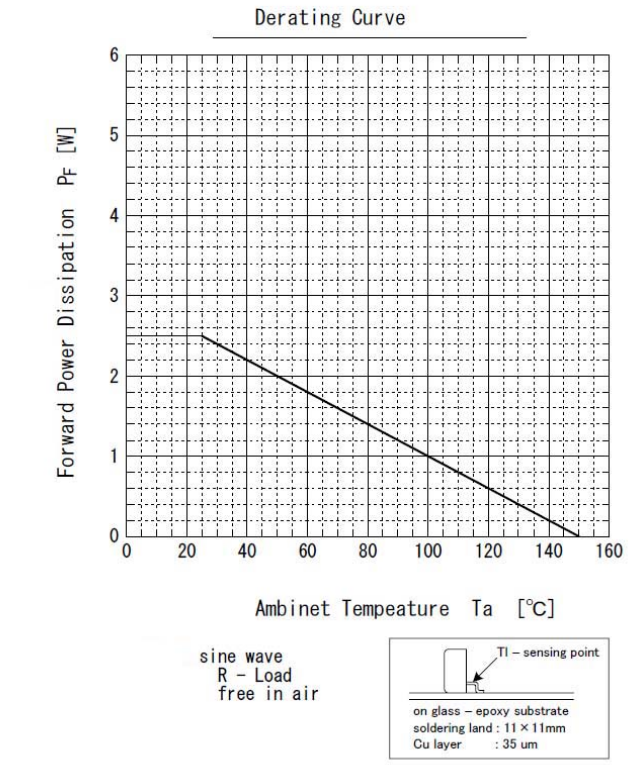

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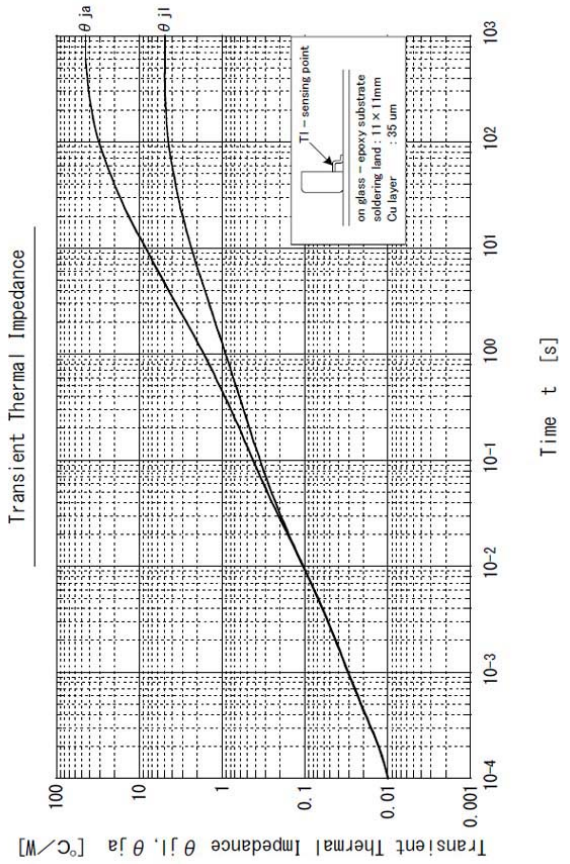

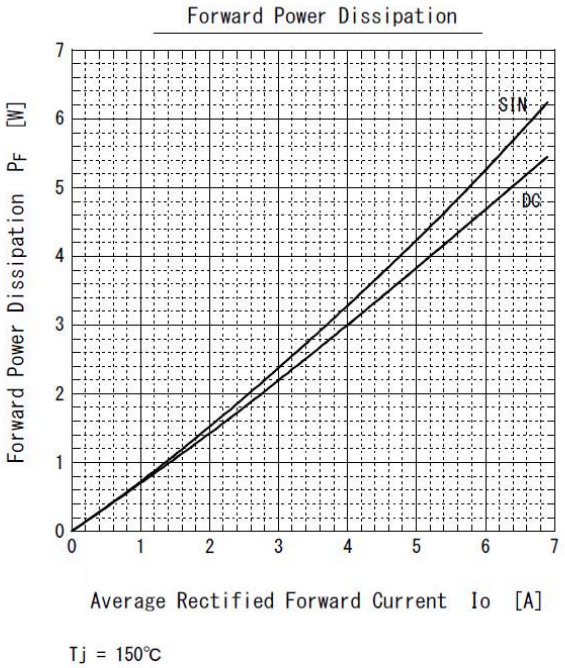

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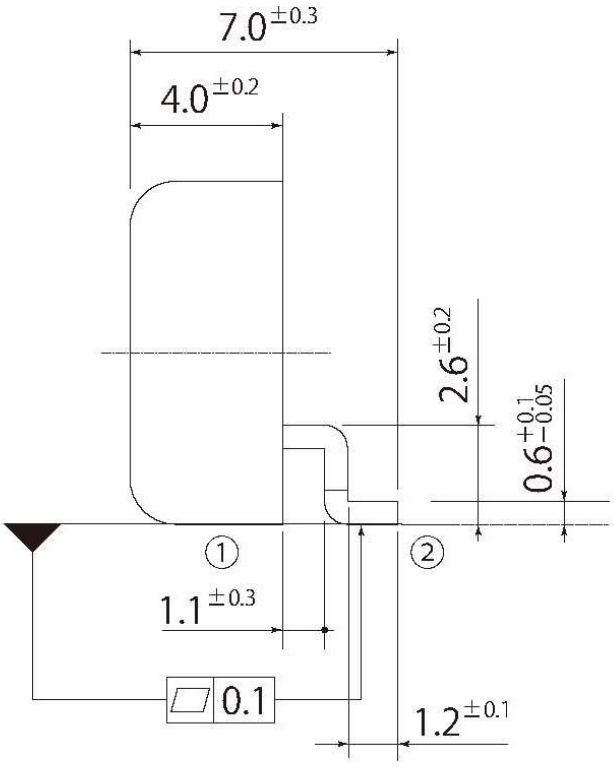
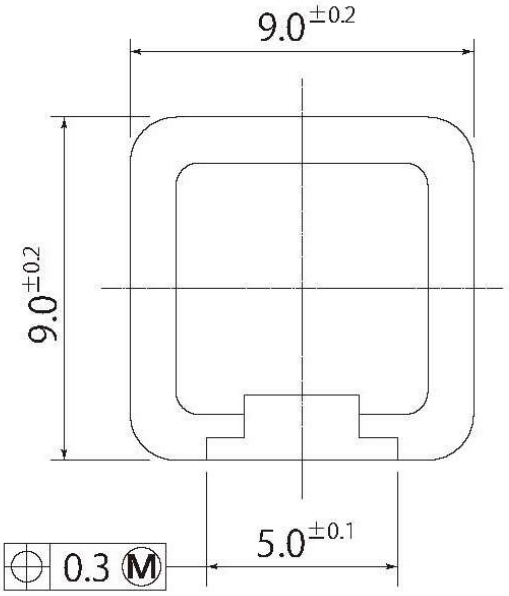
Outline Dimensions

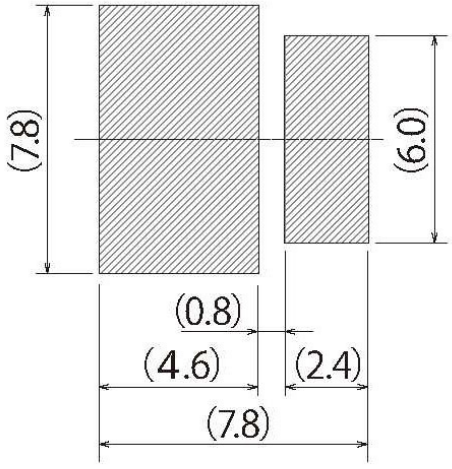
unit:mm

E1

JEDEC Code	–
JEITA Code	–
House Name	MCP







Referential Soldering Pad

・Optimize soldering pad to the board design and soldering condition.

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Notes

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