

# ST70-27MF

TVS

180A, 7000W

## Feature

- Peak pulse power:7000W
- SMD
- Available for automotive use
- Pb free terminal
- 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 <sub>RSM</sub>	10/1000μs, Non-repetitive ※	180	A
Maximum surge reverse current	I <sub>RSM</sub>	10/10000μs, Non-repetitive	100	A
Maximum surge reverse power	P <sub>RSM</sub>	10/1000μs, Non-repetitive	7000	W
Maximum surge reverse power	P <sub>RSM</sub>	10/10000μs, Non-repetitive	3500	W
Continuous (direct) reverse voltage	V <sub>R(DC)</sub>		23	V
Power dissipation	P		5	W

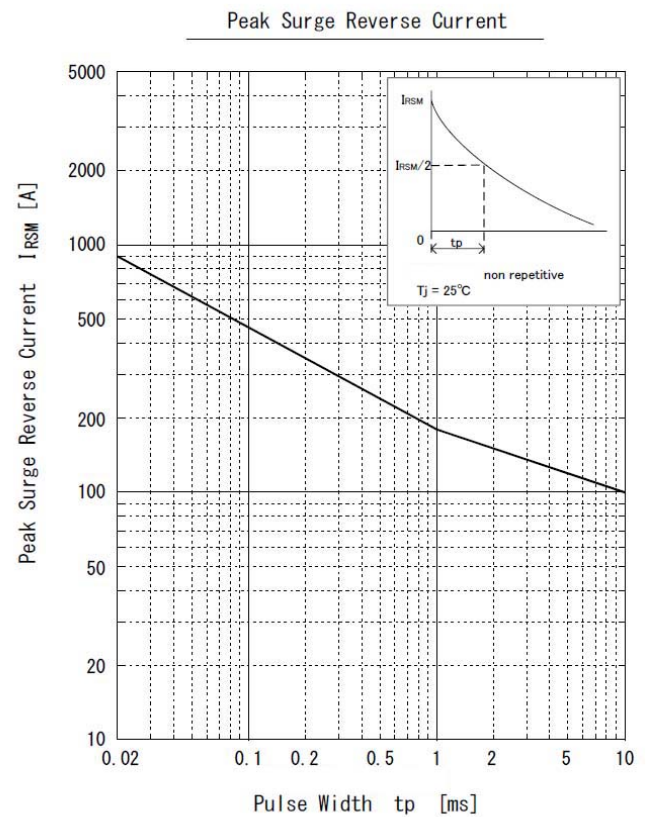
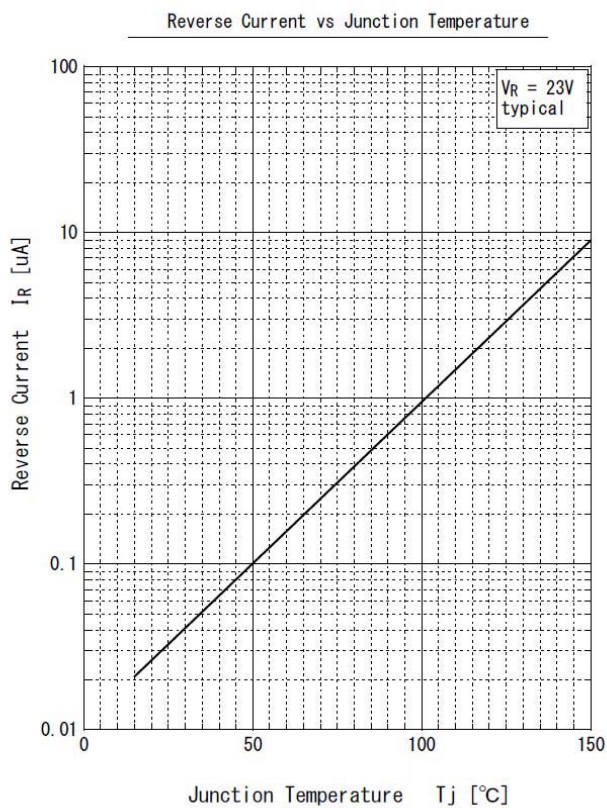
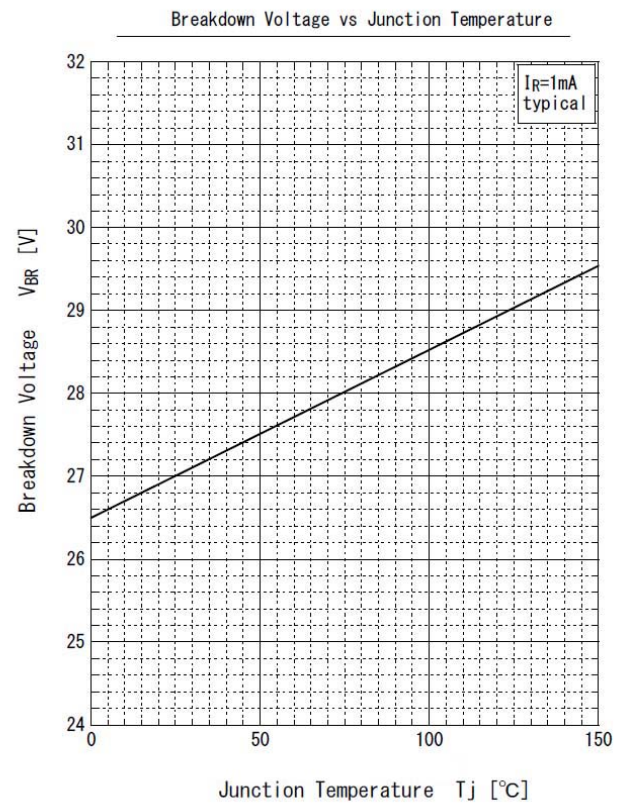
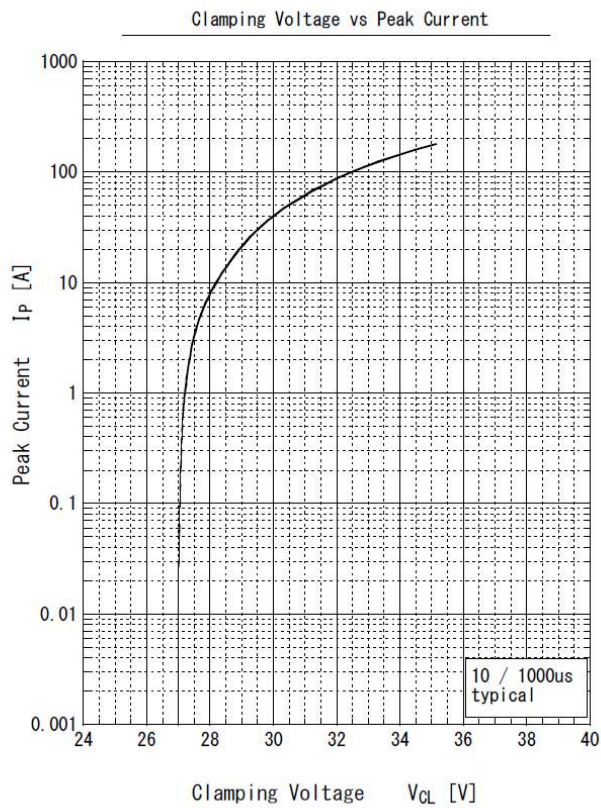
※ :See the original Specifications

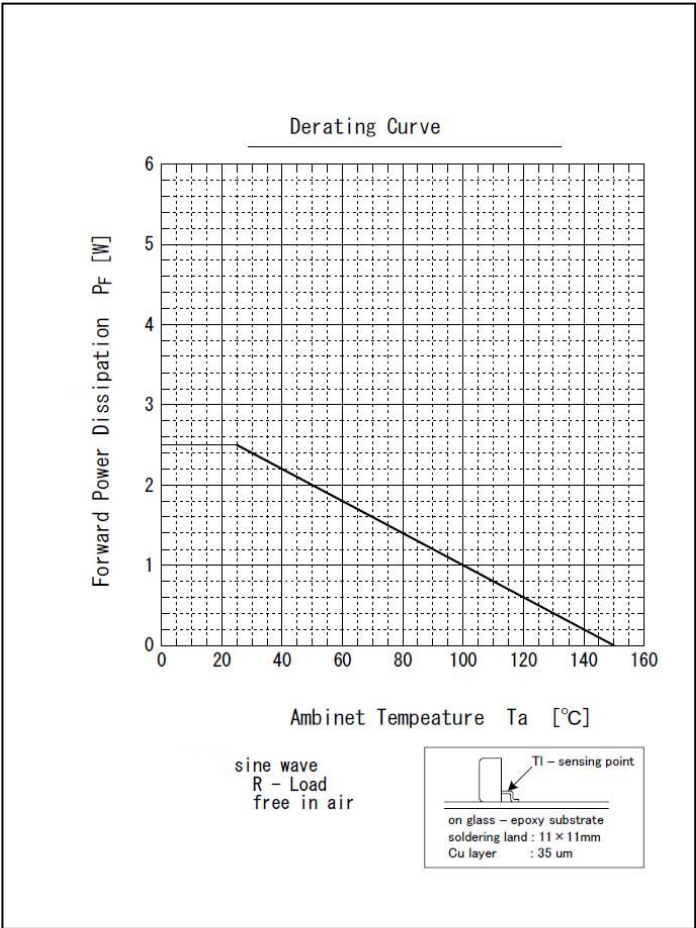
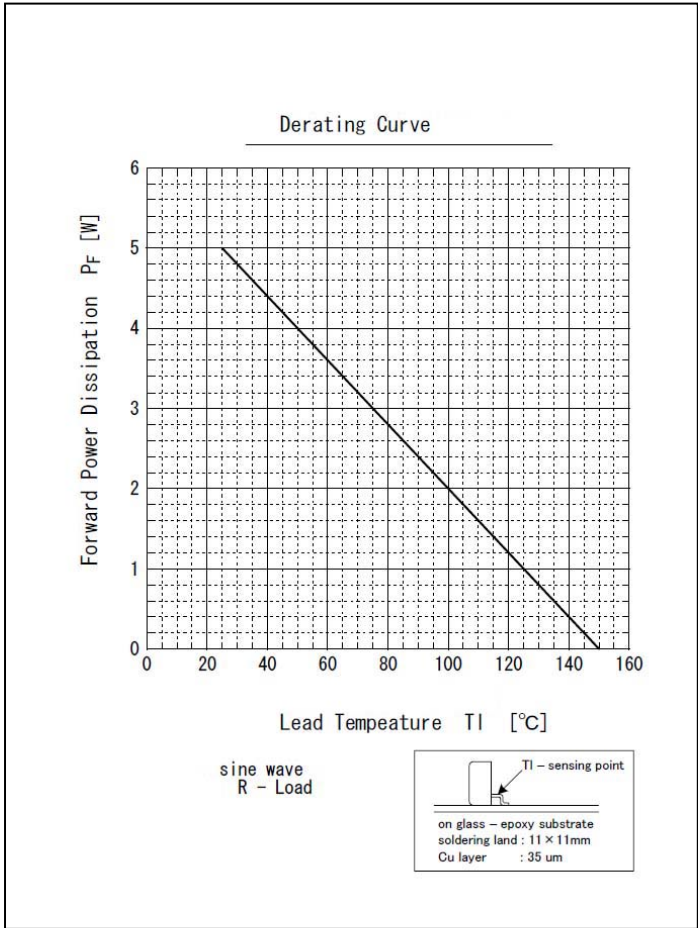
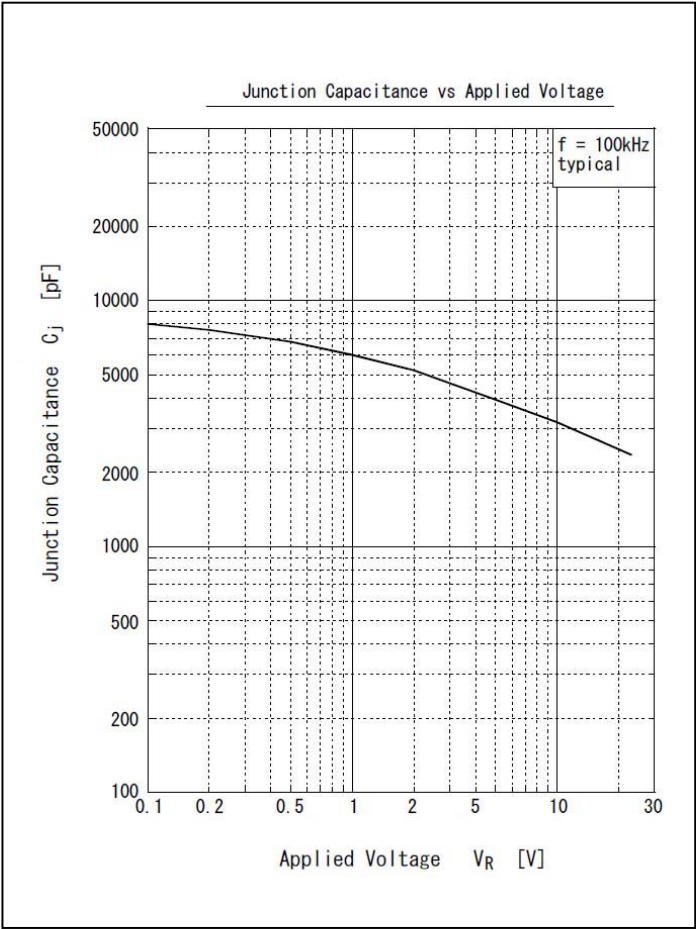
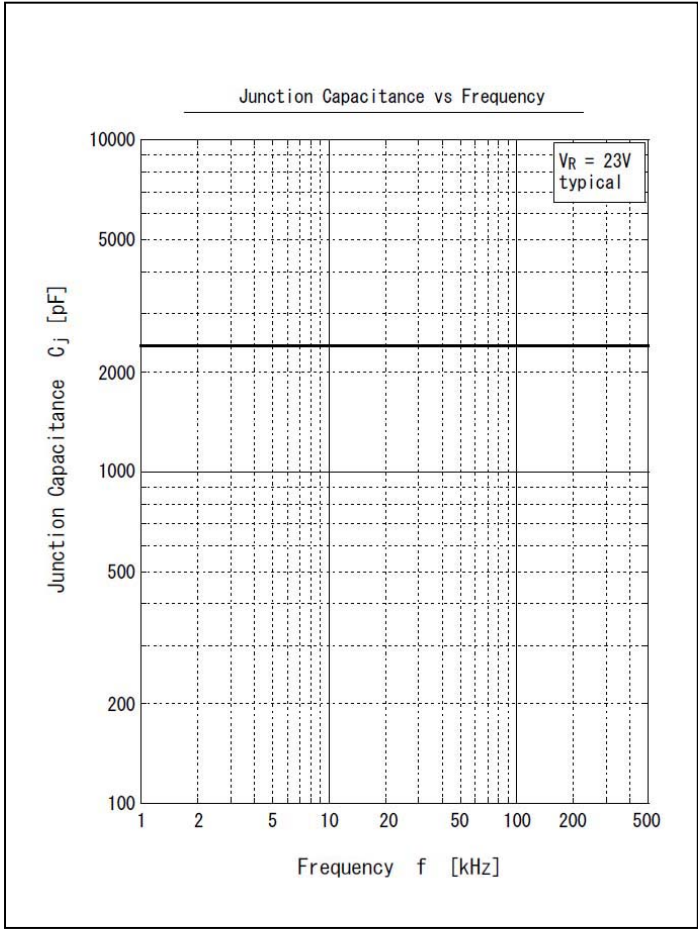
**Electrical Characteristics** (unless otherwise specified : Tl=25°C)

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

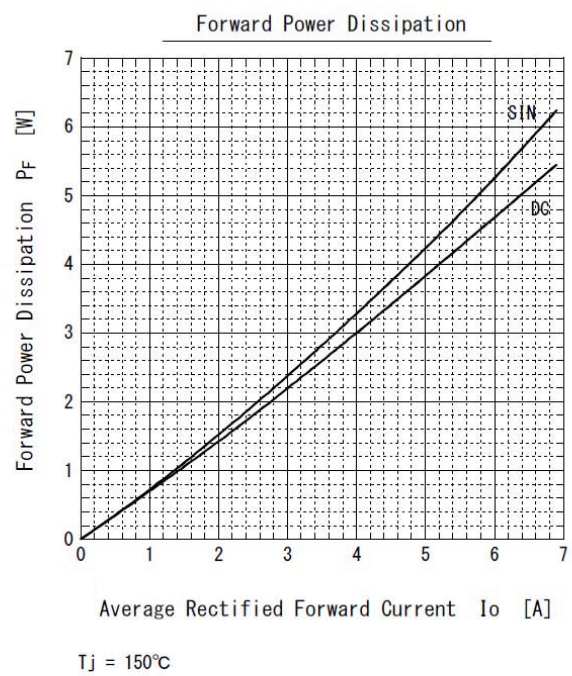
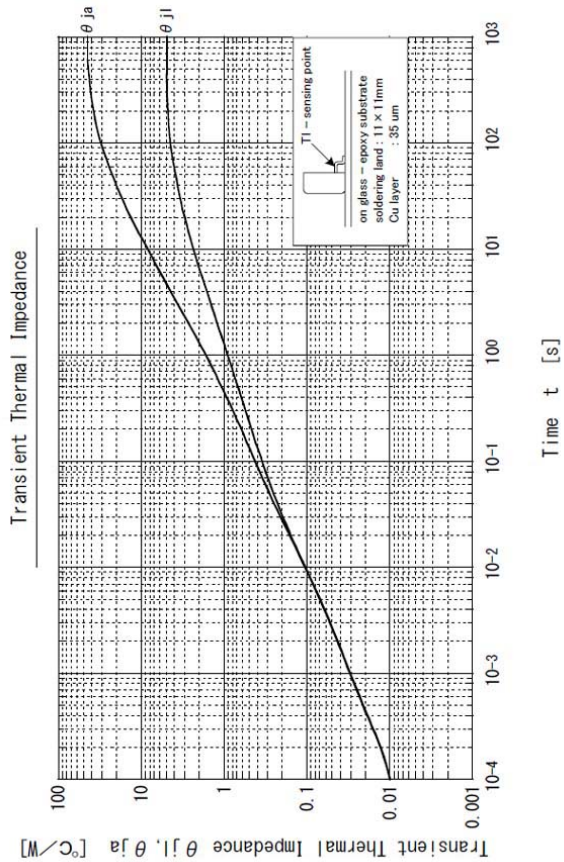
※ :See the original Specifications

## CHARACTERISTIC DIAGRAMS



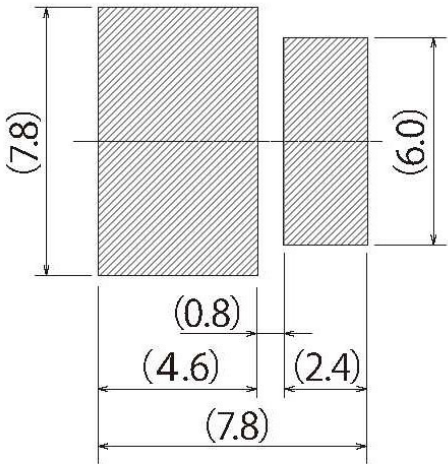
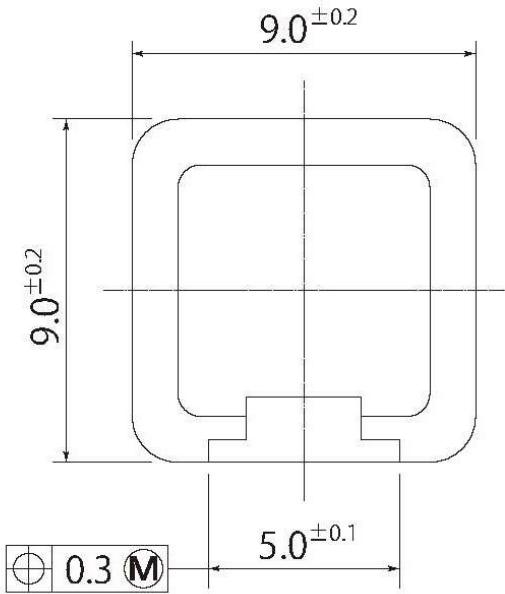
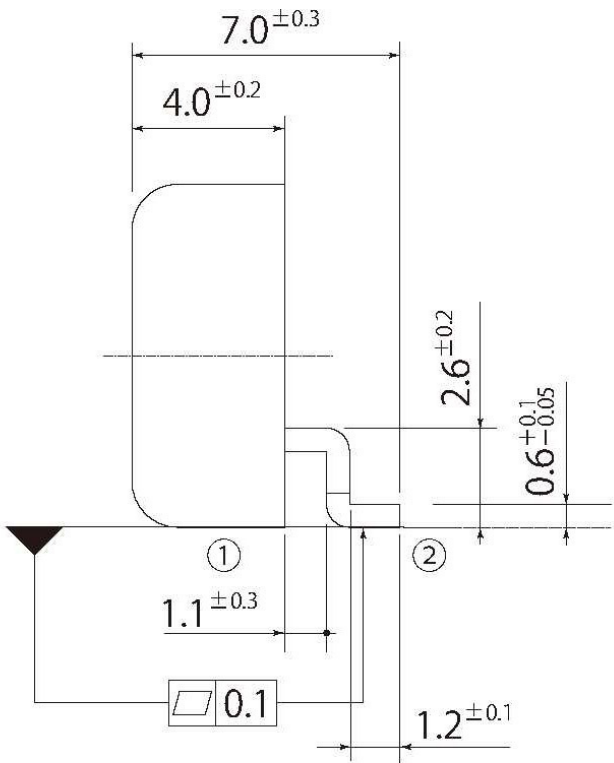






E1

JEDEC Code	—
JEITA Code	—
House Name	MCP



Referential Soldering Pad

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

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