

ST70-27MF

TVS

180A, 7000W

Feature

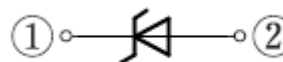
- Peak pulse power:7000W
- SMD
- Available for automotive use
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): MCP



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T _{stg}		-40 to 150	°C
Operating junction temperature	T _j		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

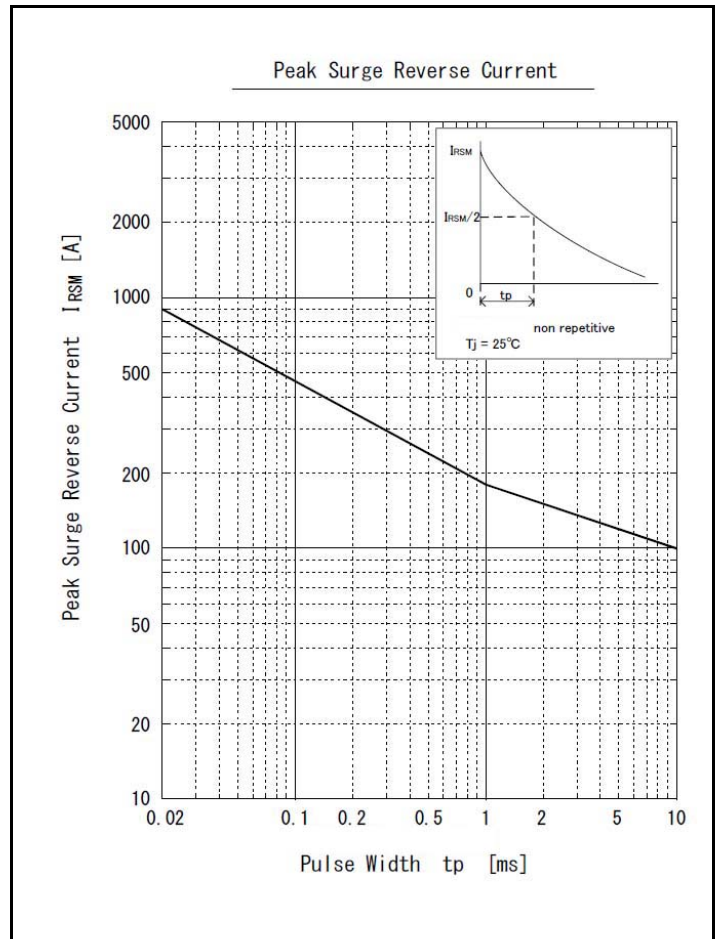
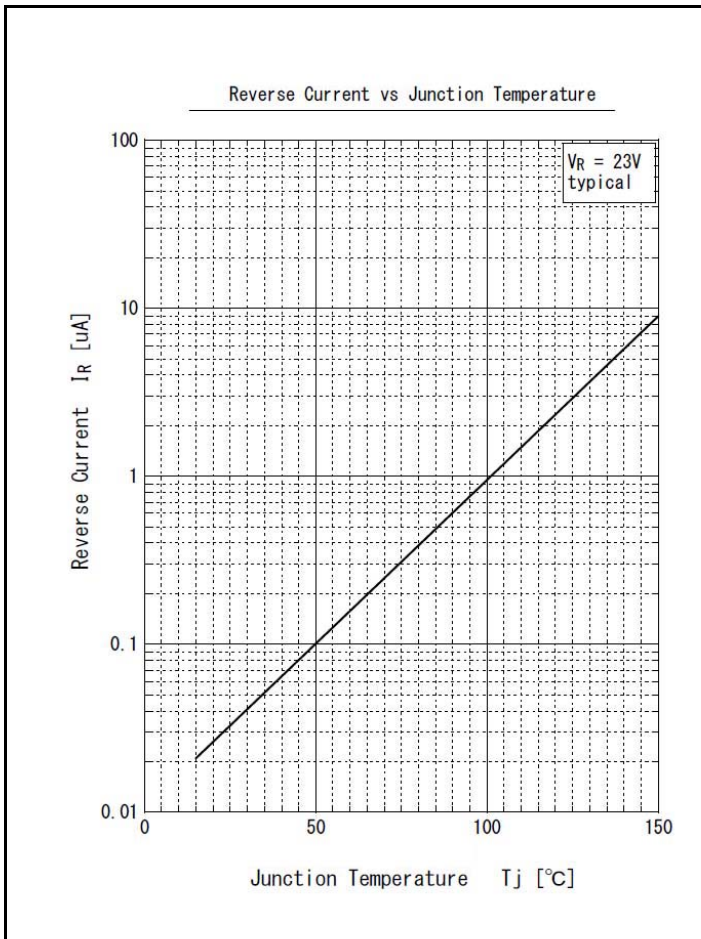
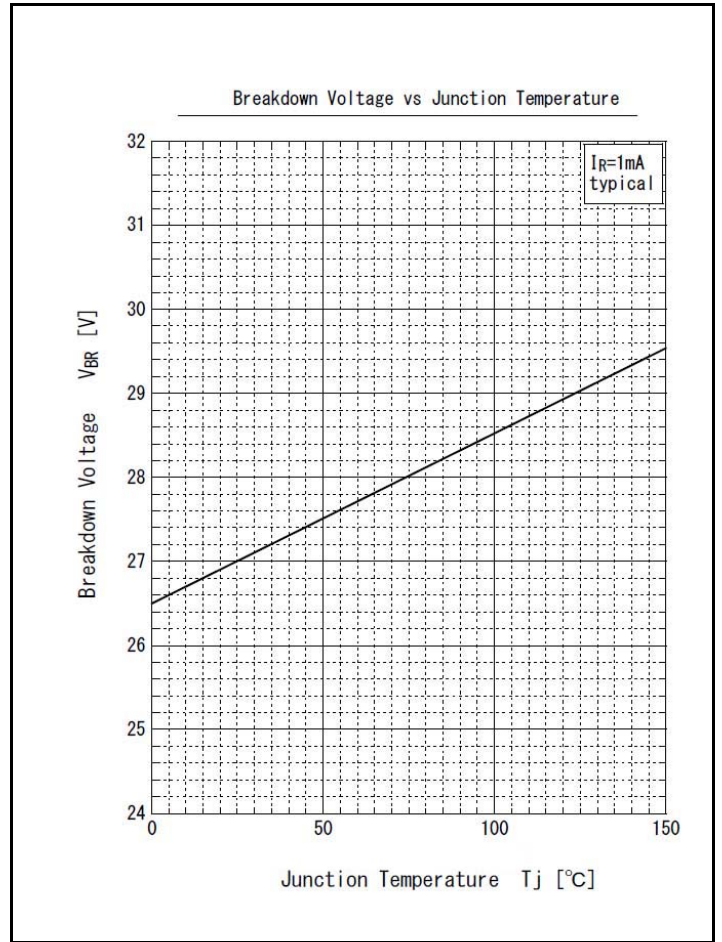
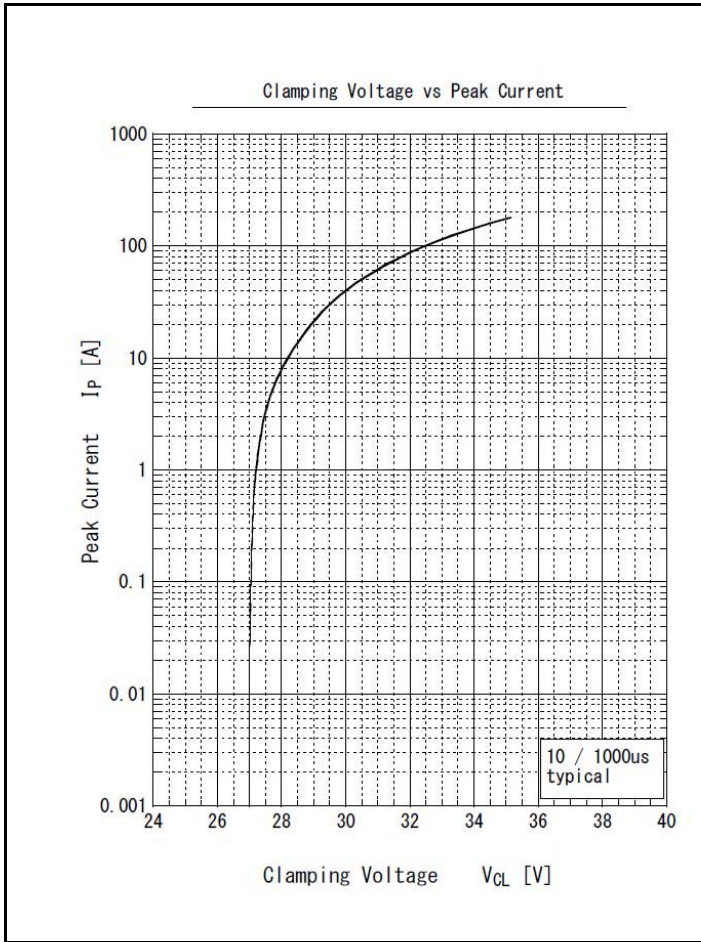
* :See the original Specifications

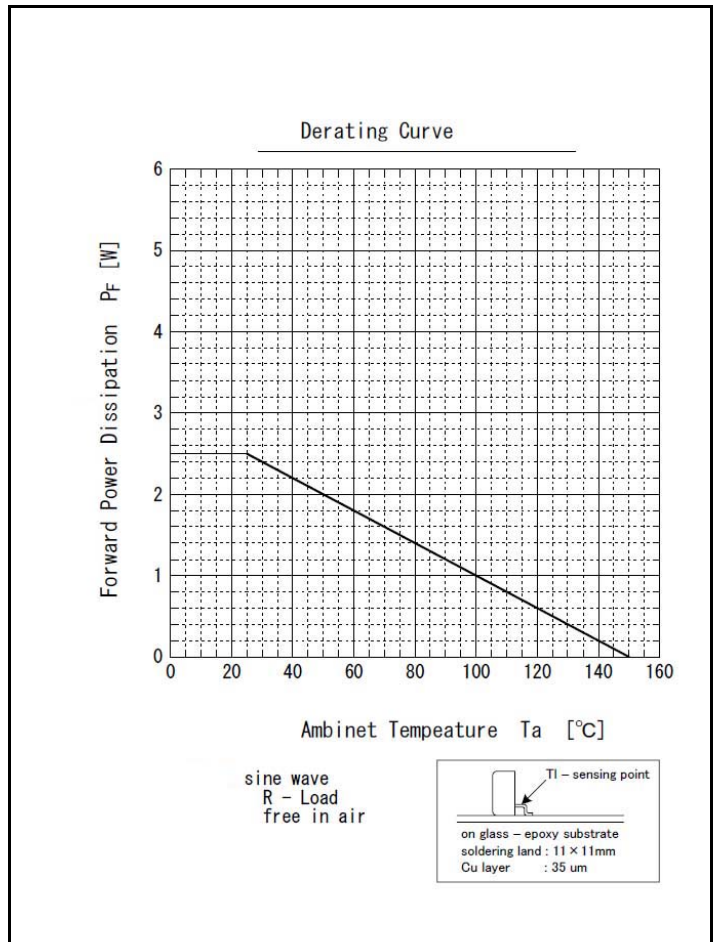
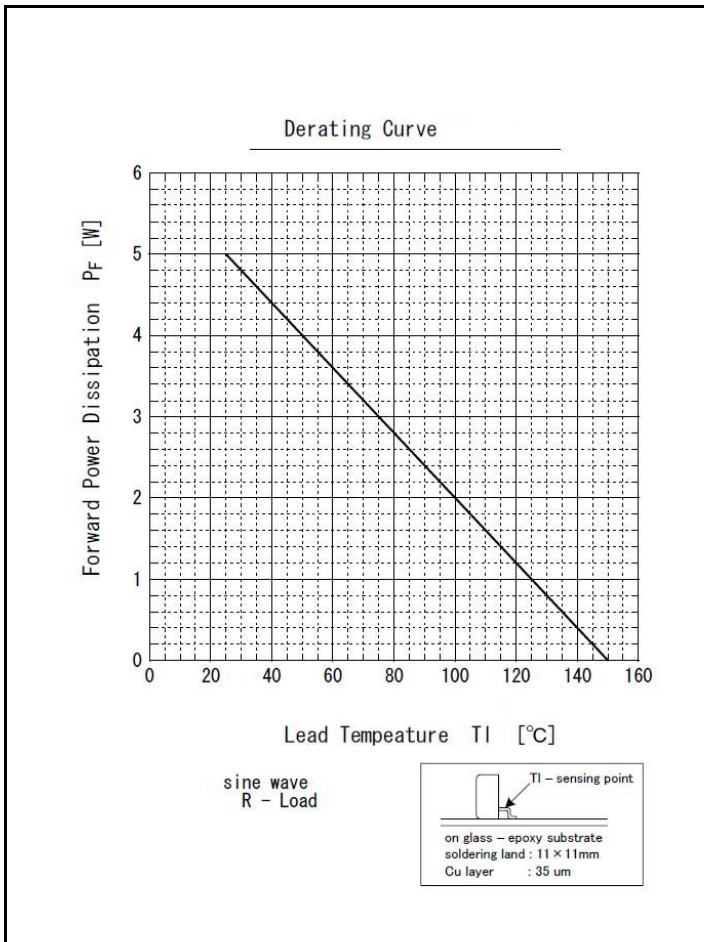
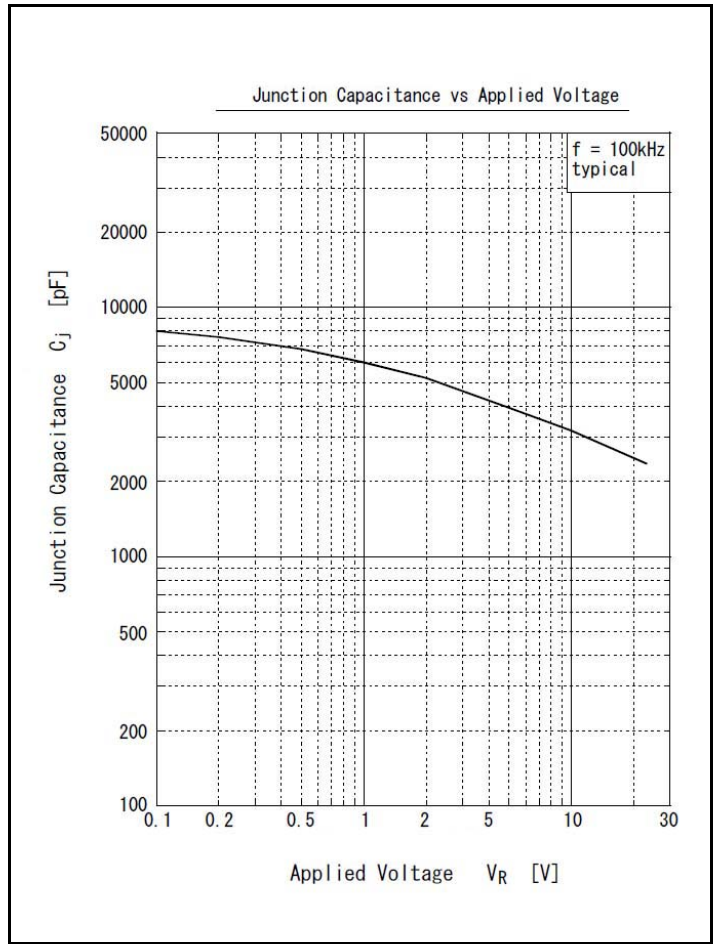
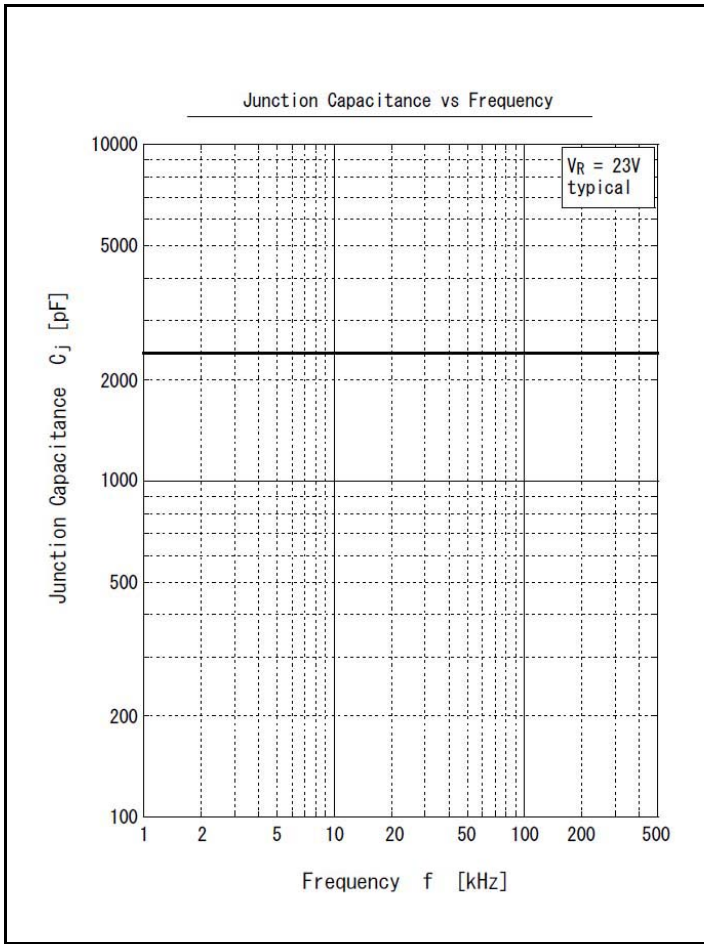
Electrical Characteristics (unless otherwise specified : Tl=25°C)

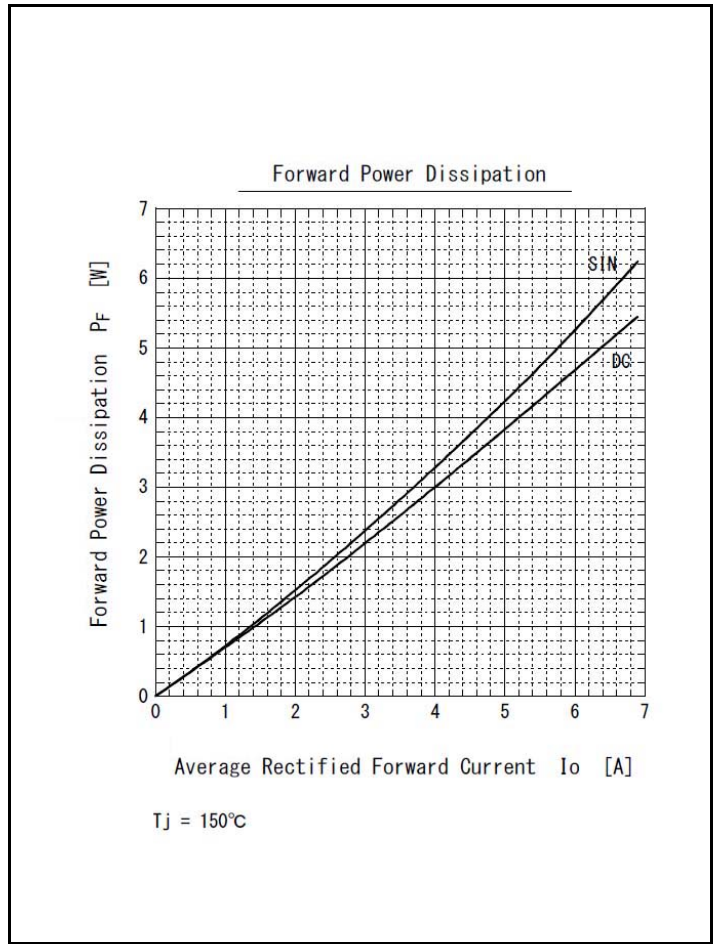
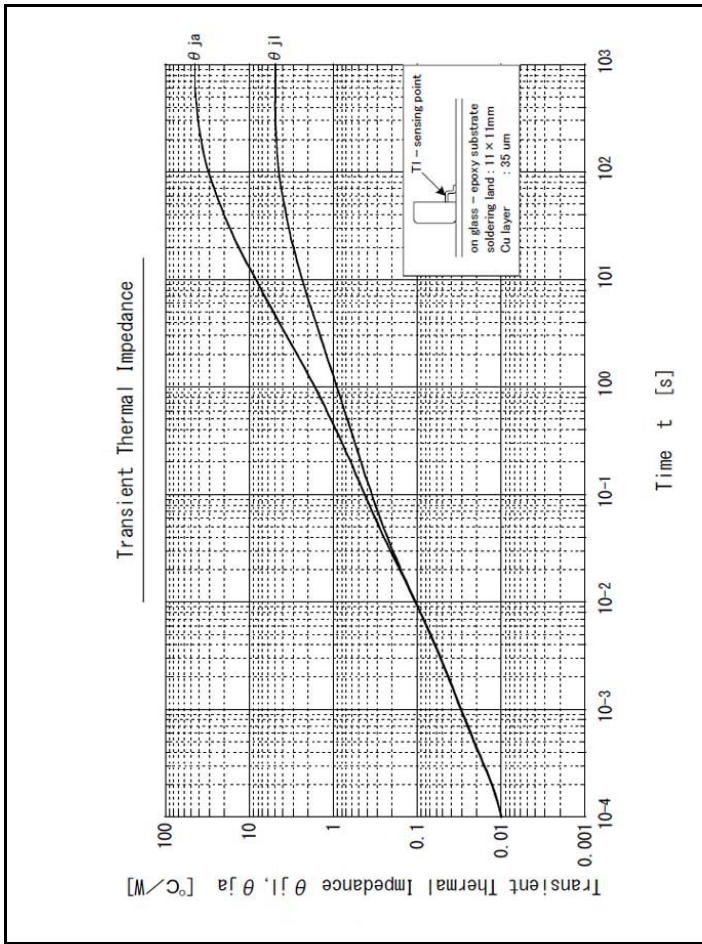
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage	V_{BR}	$I_R=1mA$	24.3		29.7	V
Reverse current	I_R	$V_R=23V$, Pulse measurement			5	μA
Thermal resistance	$R_{th(j-l)}$	Junction to lead, On glass-epoxy substrate			5	$^{\circ}C/W$
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On glass-epoxy substrate			45	$^{\circ}C/W$
Forward voltage	V_F	$I_F=30A$, Pulse Measurement			1.3	V
Temperature coefficient	r_z				0.09	$\%/^{\circ}C$

* :See the original Specifications

CHARACTERISTIC DIAGRAMS

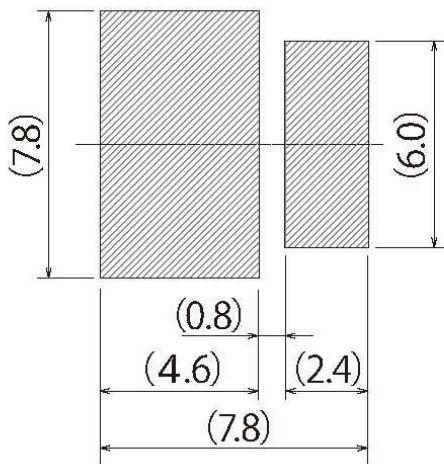
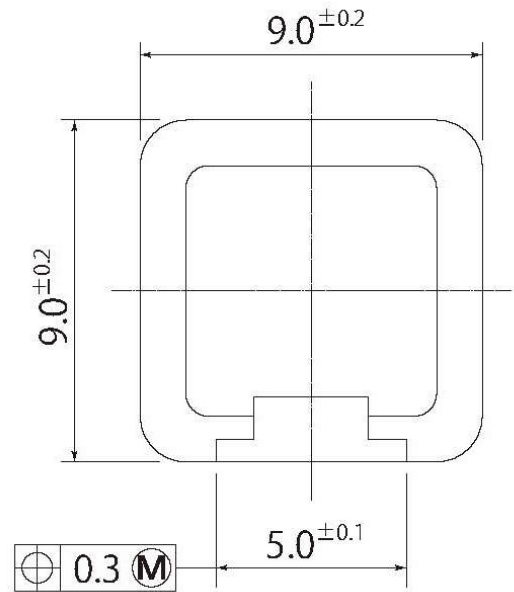
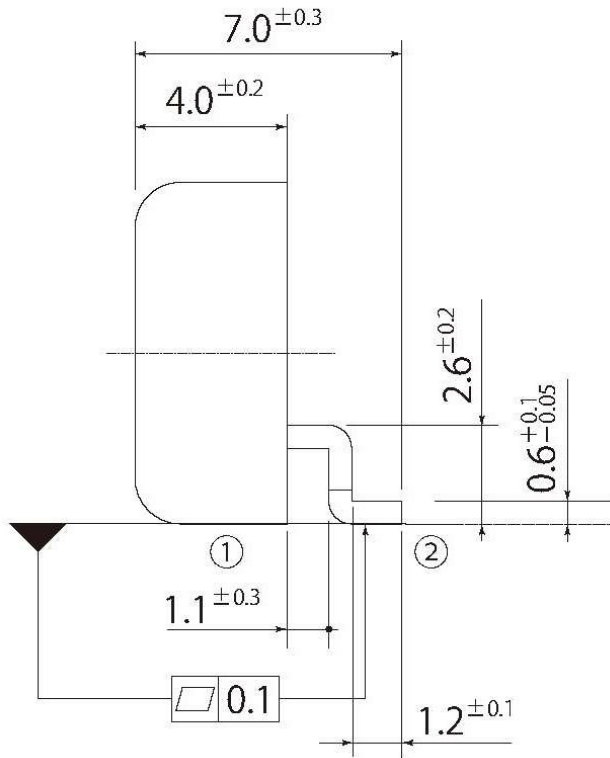






E1

JEDEC Code	—
JEITA Code	—
House Name	MCP



Referential Soldering Pad

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

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