



Features

- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- Low forward voltage drop



SMC

Ordering Information

Product ID	Pack	Marking	Qty(PCS)
MBRS4201T3G	SMC	M42013MS	3000



Maximum Ratings (Ta=25°C unless otherwise noted)

Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Type Number	Limit	Units
Maximum Recurrent Peak Reverse Voltage	200	V
Maximum RMS Voltage	140	V
Maximum DC Blocking Voltage	200	V
Maximum Average Forward Rectified Current at T _L =100°C	5.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	175	A
Maximum Instantaneous Forward Voltage at 5.0A	0.92	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	0.02 2	mA mA
Typical Junction Capacitance (Note1)	380	PF
Typical Thermal Resistance R _{θJL} (Note 2)	12	°C/W
Operating Temperature Range T _J	-65 — +175	°C
Storage Temperature Range T _{stg}	-65 — +175	°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead Vertical PC Board Mounting 0.375"(9.5mm) Lead Length.



Typical Characteristics

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

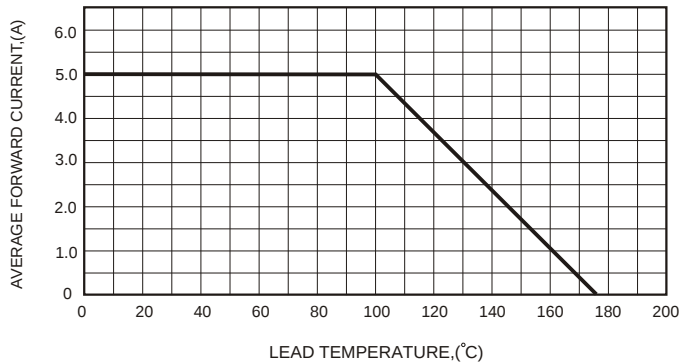


FIG.2-TYPICAL FORWARD CHARACTERISTICS

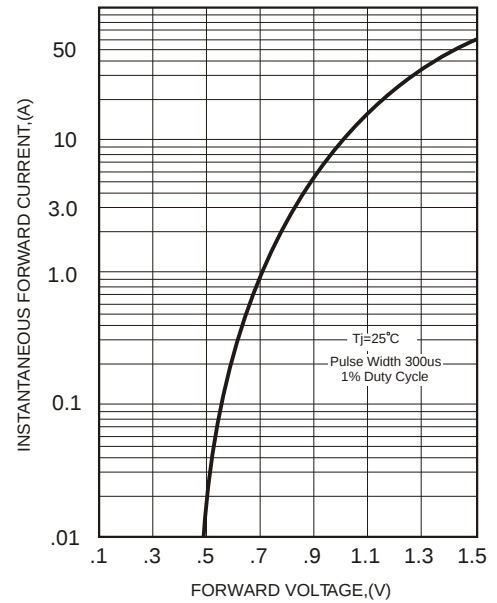


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

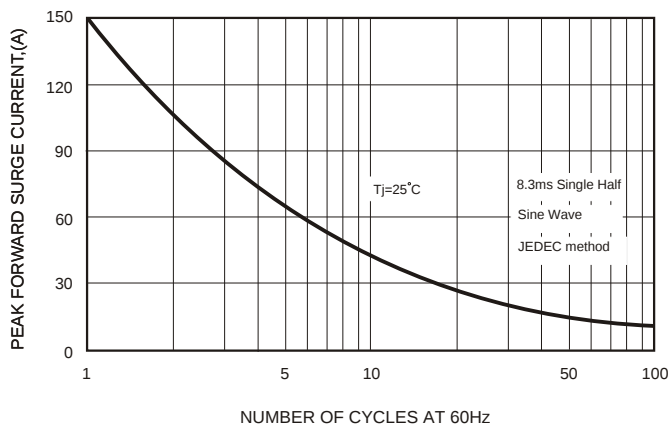


FIG.4-TYPICAL JUNCTION CAPACITANCE

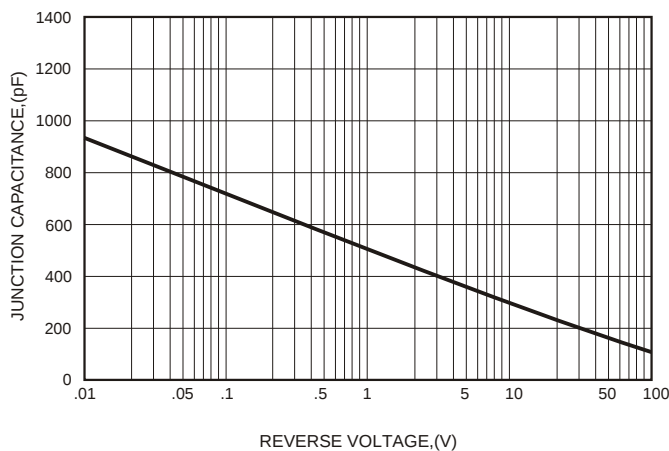
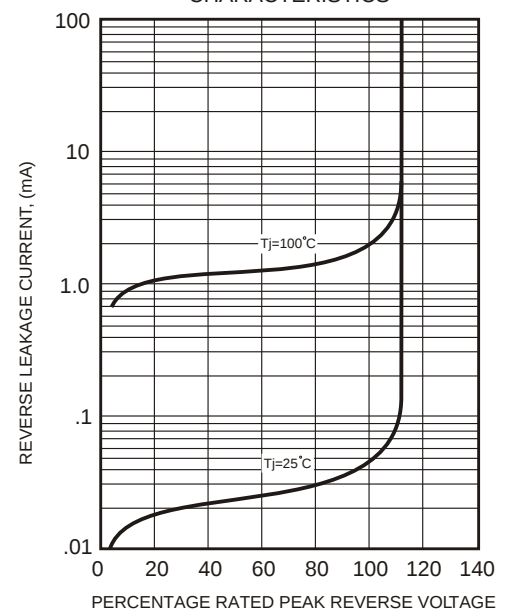
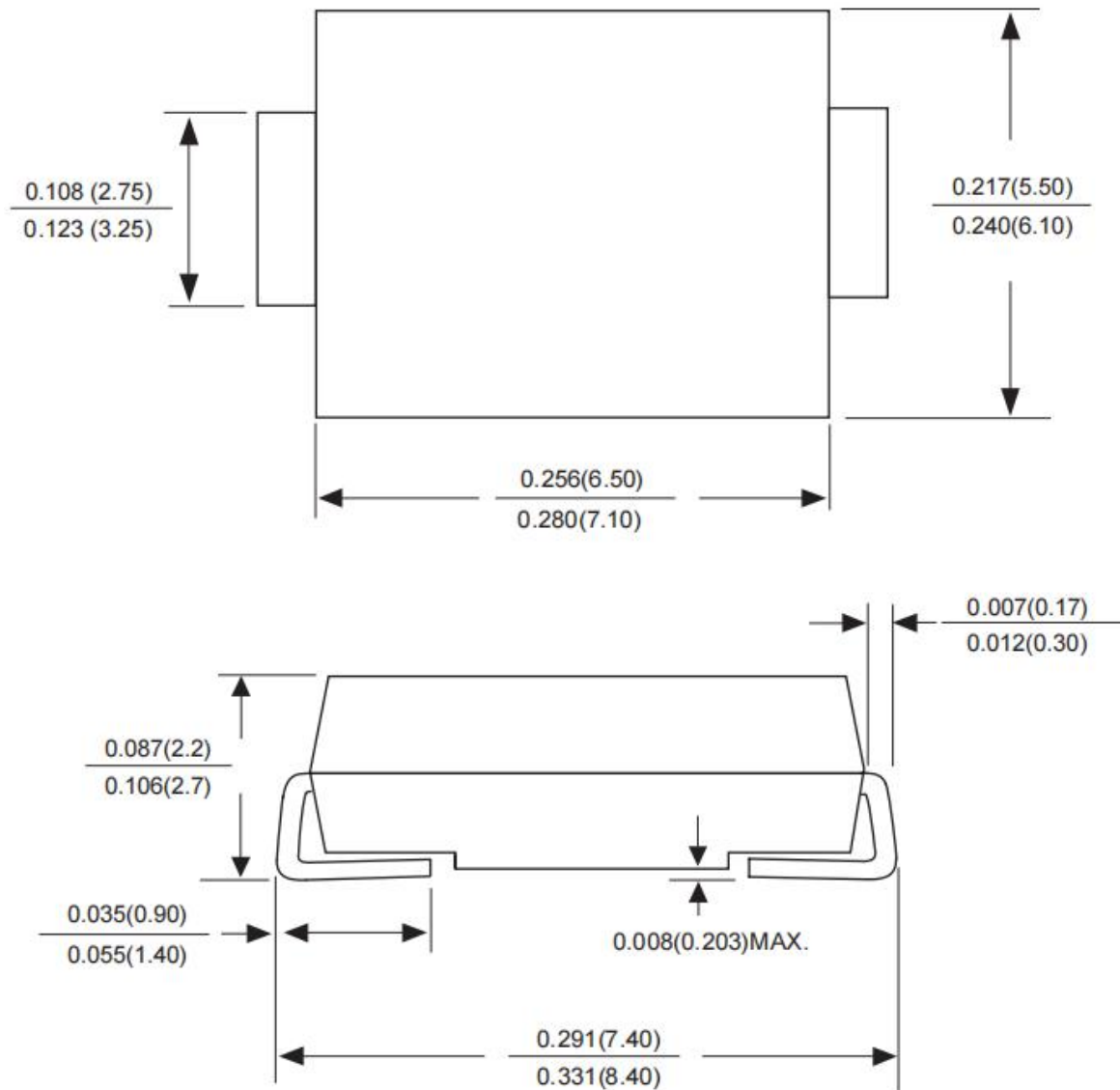


FIG.5 - TYPICAL REVERSE CHARACTERISTICS





Package Outline Dimensions SMC



Dimensions in inches and (millimeters)



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