



### Features

- Average Forward Current:  $I_{F(AV)}=3A$
- Polarity: Color band denotes cathode



SMC  
(DO-214AB)



### Ordering Information

Product ID	Pack	Marking	Qty(PCS)
MBRS3100T3G	SMC (DO-214AB)	M31003R3	3000

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

Item	Symbol	Test Conditions	Limit	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		100	V
Maximum RMS Voltage	$V_{RMS}$		70	V
Average Forward Current	$I_{F(AV)}$	60Hz Half-sine wave, Resistance load, FIG.1	3.0	A
Surge(Non-repetitive)Forward Current	$I_{FSM}$	60Hz Half-sine wave, 1 cycle, Ta=25°C	80	A
Junction Temperature	$T_J$		-55 ~ +150	°C
Storage Temperature	$T_{STG}$		-55 ~ +150	°C

### Electrical Characteristics (Ta=25°C unless otherwise specified)

Item	Symbol	Test Condition	Limit	Unit
Peak Forward Voltage	$V_F$	$I_F=3.0A$	0.85	V
Peak Reverse Current	$I_{RRM1}$	$V_{RM}=V_{RRM}$	Ta=25°C	0.02
	$I_{RRM2}$		Ta=100°C	2
Thermal Resistance(Typical)	$R_{\theta J-A}$	Between junction and ambient	60	°C/ W
	$R_{\theta J-L}$	Between junction and terminal	20	

### Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.27" x 0.27" (7.0 mm x 7.0 mm) copper pad areas



### Typical Characteristics

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

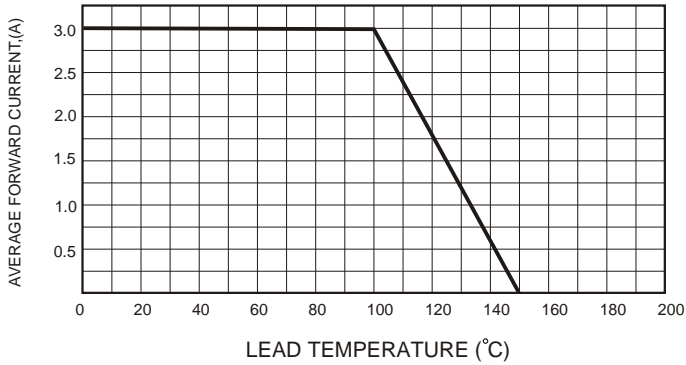


FIG.2-TYPICAL FORWARD CHARACTERISTICS

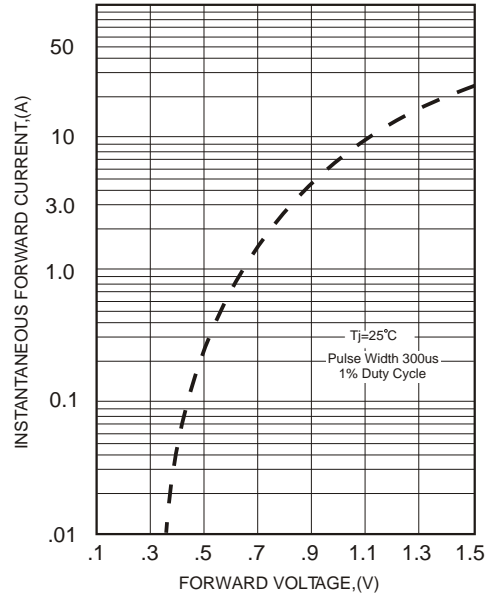


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

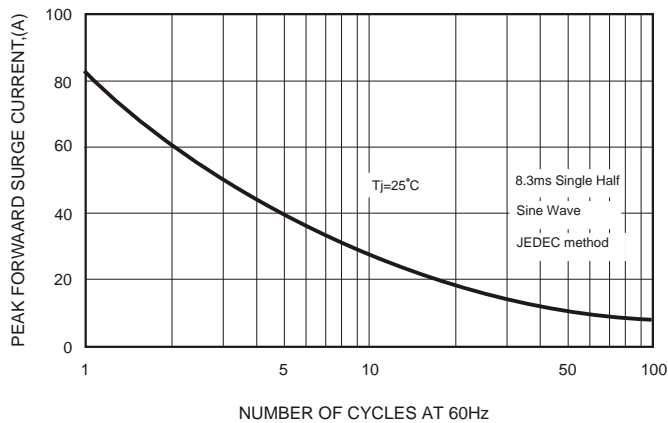


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

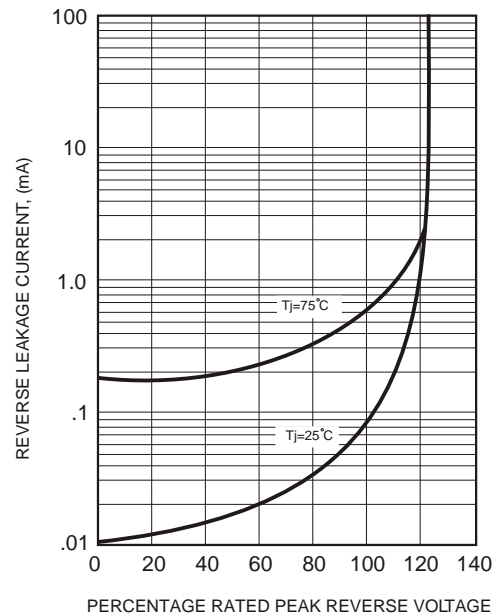
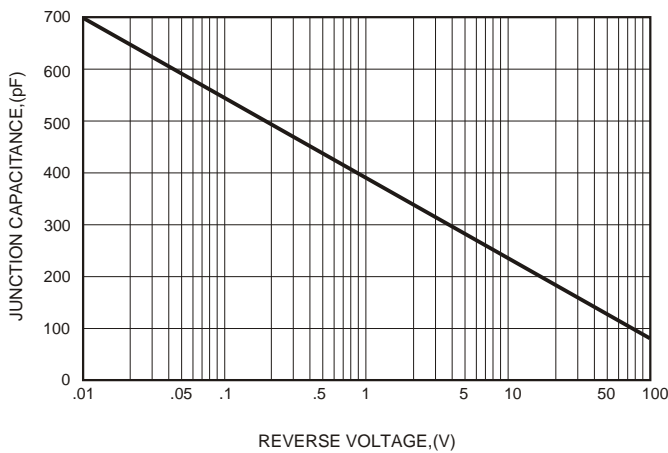
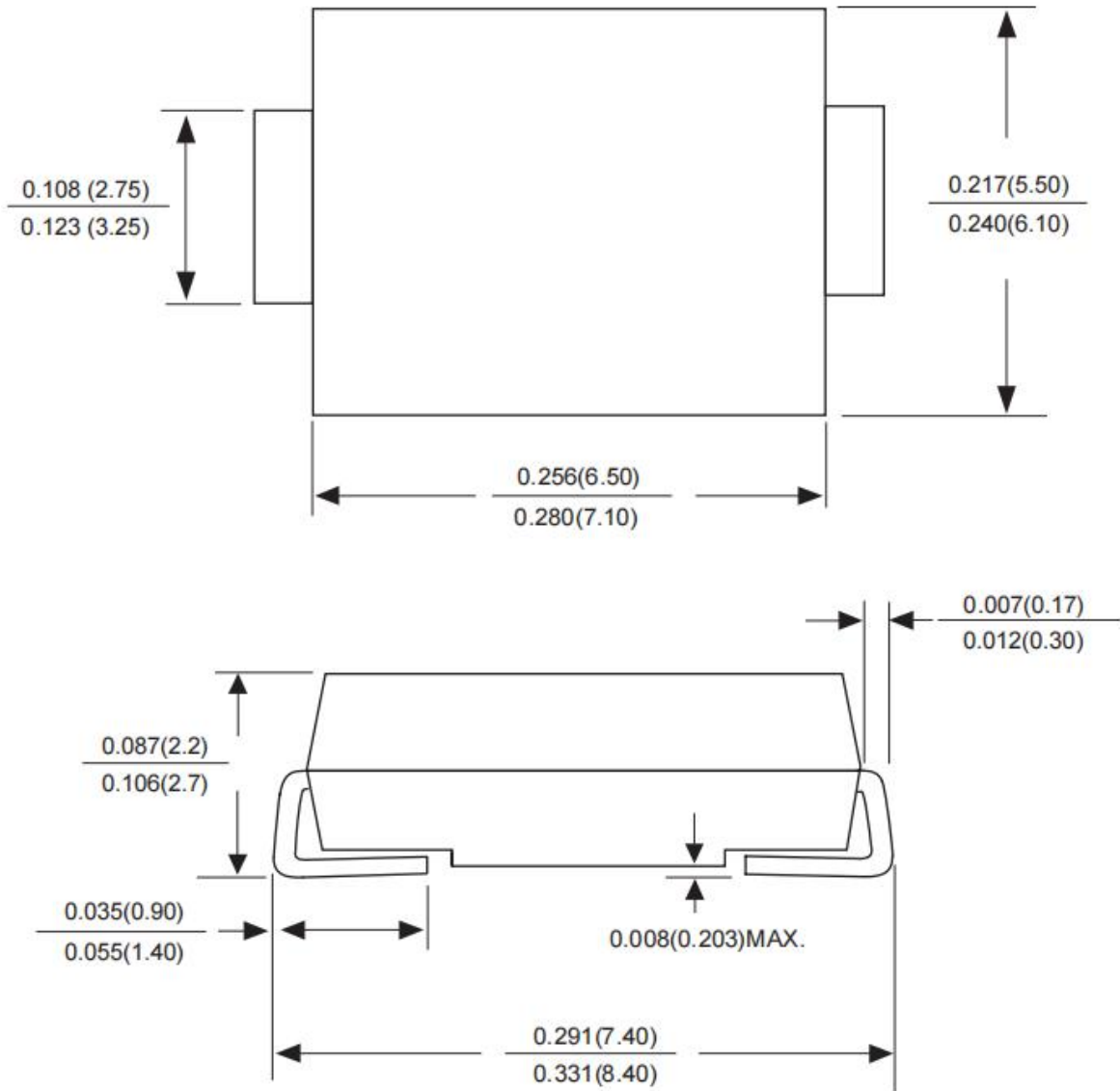


FIG.4-TYPICAL JUNCTION CAPACITANCE





**Package Outline Dimensions**  
**SMC(DO-214AB)**



Dimensions in inches and (millimeters)



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