MBRS540T3G
SCHOTTKY RECTIFIER DIODES

Features

- Average Forward Current:$I_{F(AV)}$=5A
- Polarity: Color band denotes cathode



SMC (DO-214AB)



Ordering Information

Product ID	Pack	Marking	Qty(PCS)
MBRS540T3G	SMC (DO-214AB)	M5403BGE	3000

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

Item	Symbol	Test Conditions	Limit	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		40	V
Maximum RMS Voltage	V_{RMS}		28	V
Average Forward Current	$I_{F(AV)}$	60Hz Half-sine wave, Resistance load, FIG.1	5.0	A
Surge(Non-repetitive)Forward Current	I_{FSM}	60Hz Half-sine wave, 1 cycle, Ta=25°C	150	A
Junction Temperature	T_J		-50 ~ +125	°C
Storage Temperature	T_{STG}		-50 ~ +150	°C

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

Item	Symbol	Test Condition		Limit	Unit
Peak Forward Voltage	V_F	I_F=5.0A		0.55	V
Peak Reverse Current	I_{RRM1}	$V_{RM}=V_{RRM}$	Ta=25°C	0.1	mA
	I_{RRM2}		Ta=100°C	5	
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 0.6" x 0.6" (16 mm x 16 mm) copper pad areas

Typical Characteristics

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

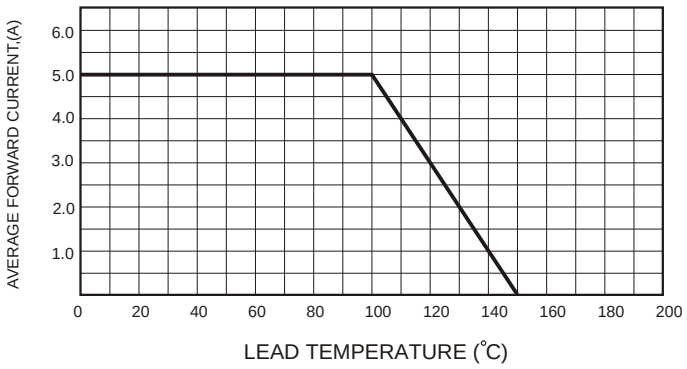


FIG.2-TYPICAL FORWARD CHARACTERISTICS

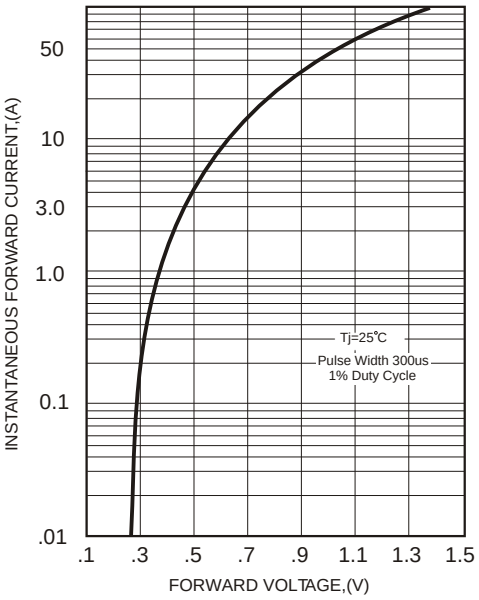


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

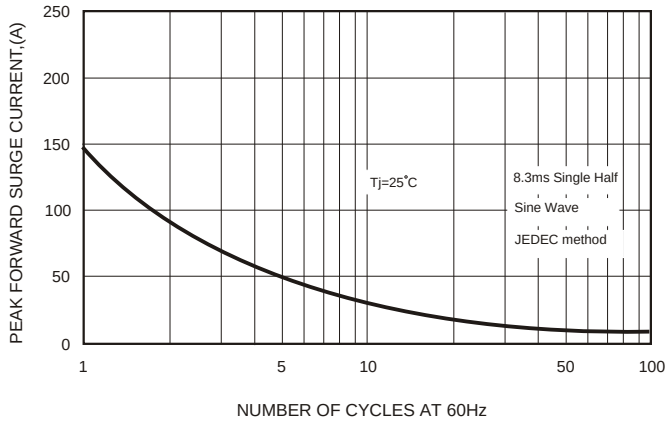


FIG.4-TYPICAL JUNCTION CAPACITANCE

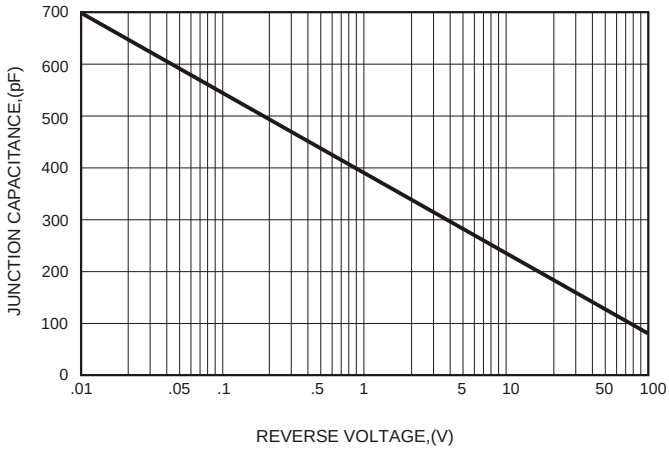
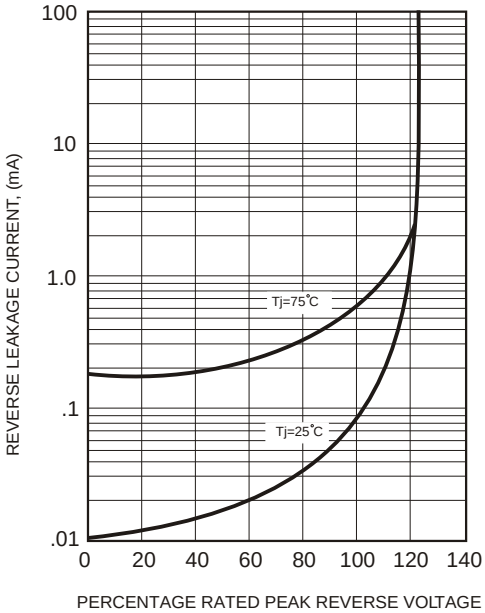
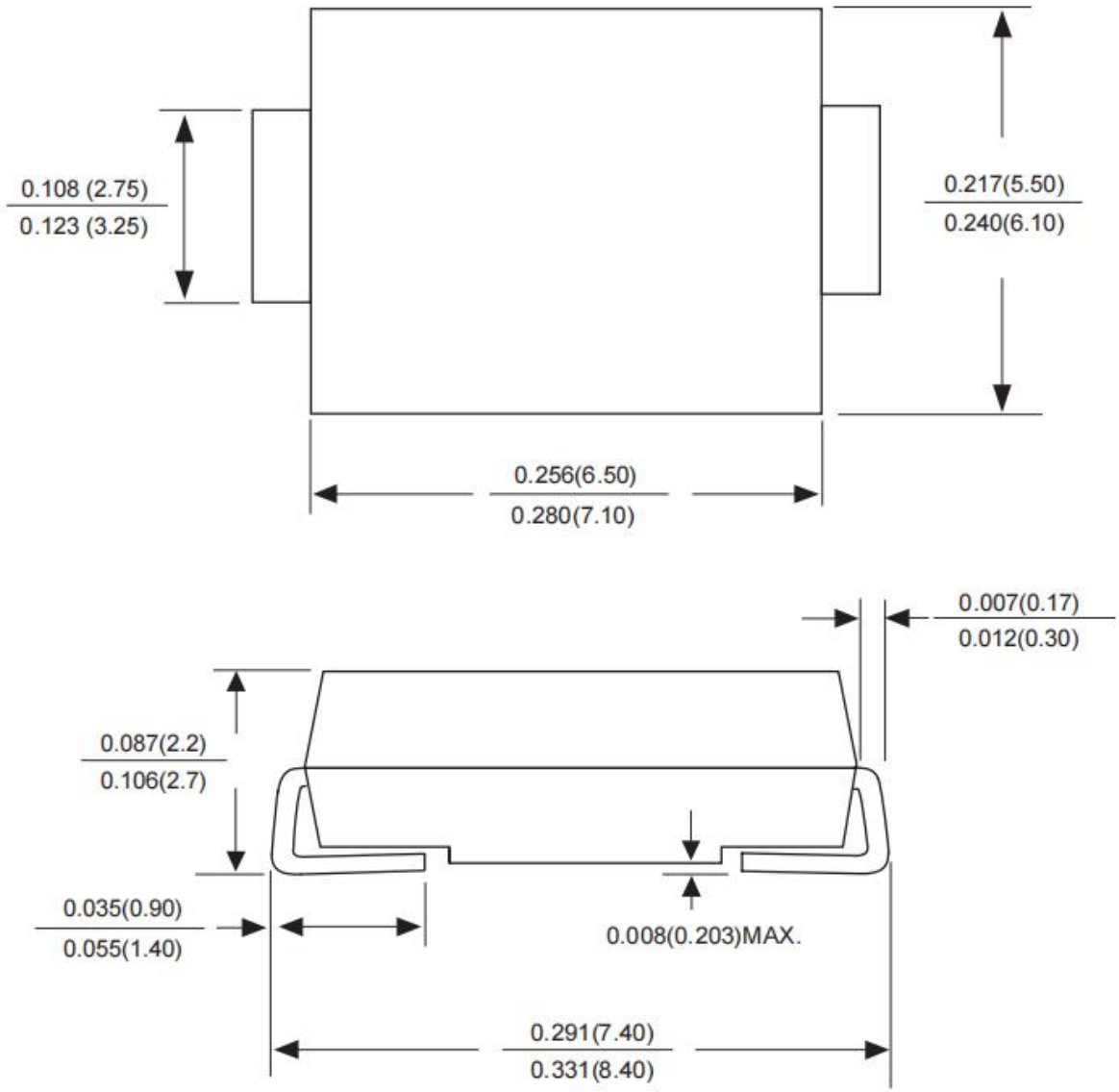


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Package Outline Dimensions

SMC(DO-214AB)



Dimensions in inches and (millimeters)

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