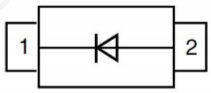
Features

- Schottky barrier diodes
- Low forward voltage drop
- High Tunction Temperature
- Moisture sensitivity: level 1, per J-STD-020
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

SMC(DO-214AB)

Applications

For use in low voltage,high freqency inverters,free wheeling, and polarity protection application



Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	**Symbol**	MBRS3100T3G-JSM	**Unit**
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	100	V
Maximum DC blocking voltage	V_{DC}	100	V
Maximum average forward rectified current	$I_{F(AV)}$	3.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	80	A
Operating junction and storage temperature range	T_J, T_{STG}	- 65 to + 125	°C

Electrical Characteristics

(T_A = 25 °C unless otherwise specified)

Parameter	**Test Conditions**	**Symbol**	MBRS3100T3G-JSM	**Unit**
Maximum instantaneous forward voltage	I_F=3A, T_A=25℃	V_F	0.50	V
Maximum DC reverse current at rated DC blocking voltage	T_A=25℃	I_R	1.0	mA
	T_A=100℃		20	
Typical junction capacitance	4.0 V, 1 MHz	C_J	110	pF

Thermal Characteristics

Parameter	**Symbol**	MBRS3100T3G-JSM	**Unit**
Typical thermal resistance(1)	$R_{\theta JA}$	80	℃/W
	$R_{\theta JI}$	10	

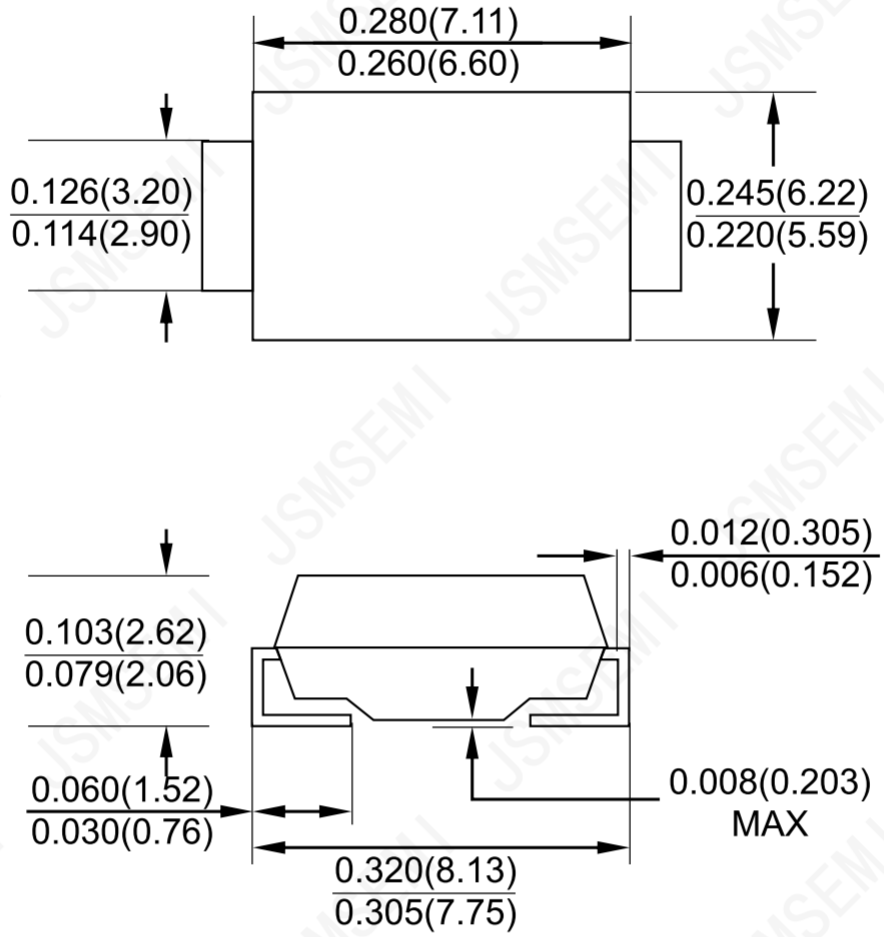
Note1:Thermal resistance from junction to lead,mounted on PCB with 5.0×5.0mm copper pads

Ordering Information

Order number	Package	Marking	Operation Temperature Range	MSL Grade	Ship, Quantity	Green
MBRS3100T3G-JSM	SMC(DO-214AB)	B310	-65 to 125°C	3	T&R,2500	Rohs

Dimensions in inches and (milli meters)

SMC/DO-214AB



Revision History

Rev.	Change	Date
V1.0	Initial version	6/27/2021

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