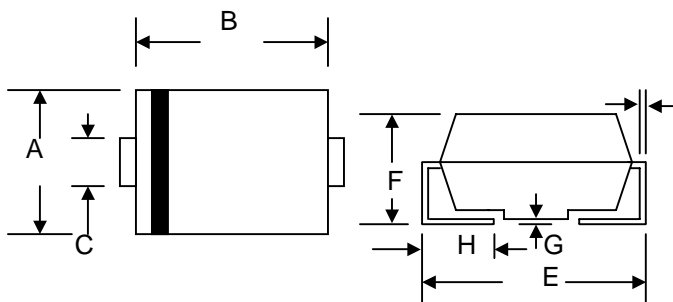


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**Features**

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 30A Peak D
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O



**Mechanical Data**

- Case: Low Profile Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)

SMB/DO-214AA				
Dim	Min	Max	Min	Max
A	3.30	3.94	0.130	0.155
B	4.06	4.70	0.160	0.185
C	1.91	2.11	0.075	0.083
D	0.152	0.305	0.006	0.012
E	5.08	5.59	0.2	0.220
F	2.13	2.44	0.084	0.096
G	0.051	0.203	0.002	0.008
H	0.76	1.27	0.030	0.05
	In mm		In inch	

**Maximum Ratings and Electrical Characteristics** @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	MBRS120	MBRS130	MBRS140	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>				
Working Peak Reverse Voltage	V <sub>VRWM</sub>	20	30	40	V
DC Blocking Voltage	V <sub>R</sub>				
RMS Reverse Voltage	V <sub>R(RMS)</sub>	14	21	28	V
Average Rectified Output Current @T <sub>L</sub> = 75°C	I <sub>o</sub>	1.0			A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30			A
Forward Voltage @I <sub>F</sub> = 1.0A	V <sub>FM</sub>	0.55			V
Peak Reverse Current @T <sub>A</sub> = 25°C	I <sub>RM</sub>	0.5			mA
At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C		20			
Typical Thermal Resistance Junction to Ambient (Note 1)	R <sub>θJA</sub>	95			K/W
Operating Temperature Range	T <sub>j</sub>	-65 to +125			°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150			°C

Note: 1. Mounted on P.C. Board with 5.0mm<sup>2</sup> copper pad areas

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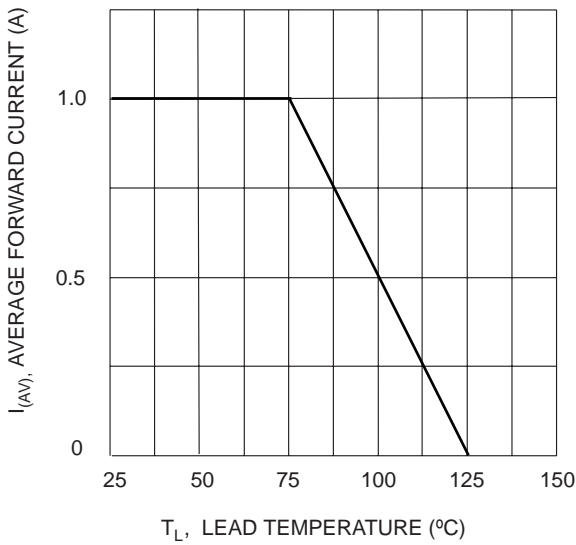


Fig. 1 Forward Current Derating Curve

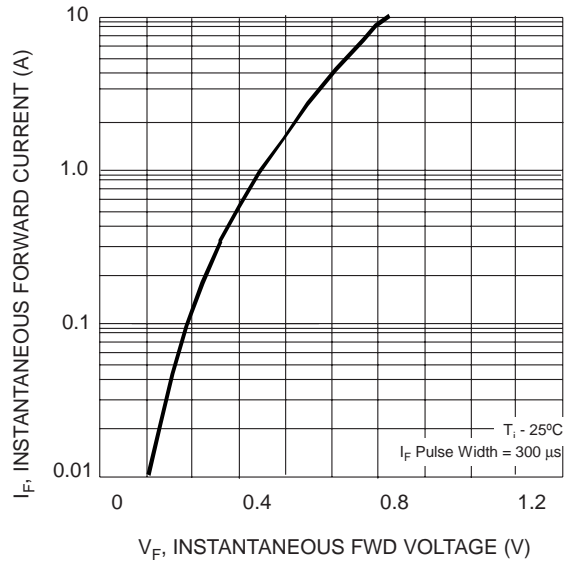


Fig. 2 Typ. Forward Characteristics

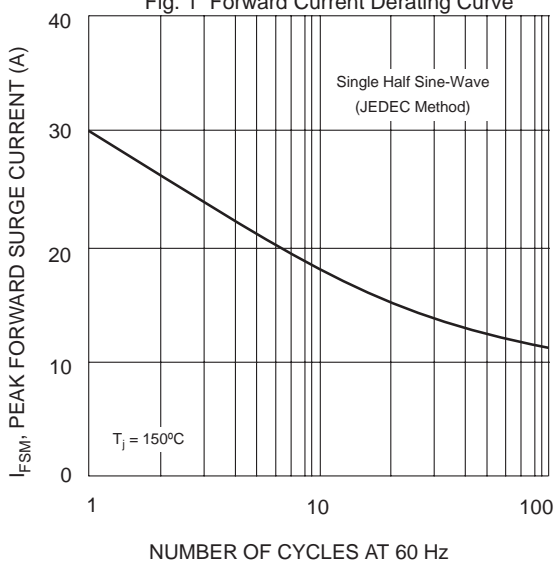


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

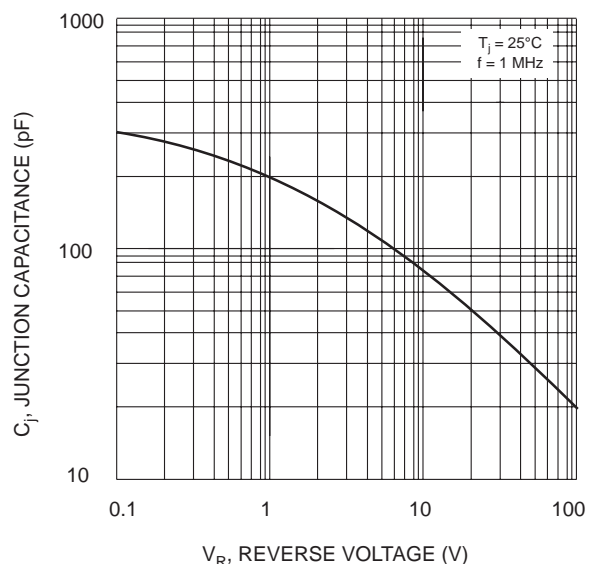


Fig. 4 Typical Junction Capacitance

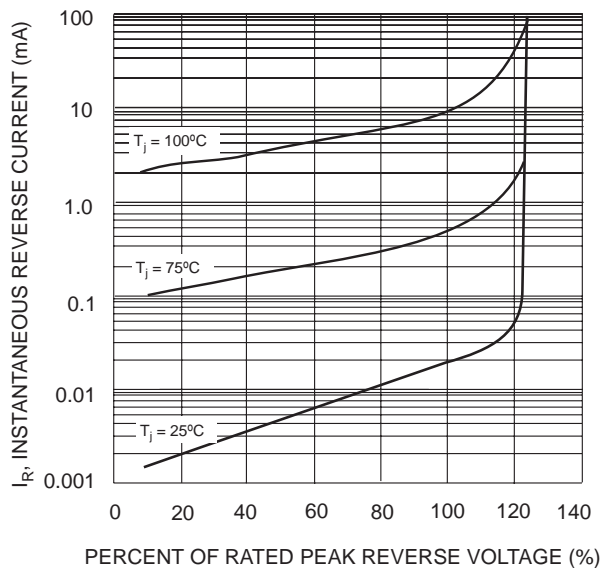


Fig. 5 Typical Reverse Characteristics

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