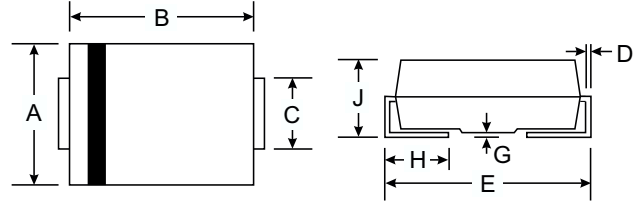


### Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 5 0A Peak
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-0



### Mechanical Data

- Case: SMB/DO-214AA, 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.)
- **Lead Free: For RoHS / Lead Free Version**

Dim	SMB	
	Min	Max
A	3.30	3.94
B	4.06	4.57
C	1.96	2.21
D	0.15	0.31
E	5.00	5.59
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	MBRS 120	MBRS 130	MBRS 140	MBRS 150	MBRS 160	MBRS 180	MBRS 1100	MBRS 1150	MBRS 1200	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$										V
Working Peak Reverse Voltage	$V_{RWM}$	20	30	40	50	60	80	100	150	200	
DC Blocking Voltage	$V_R$										
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	56	70	105	140	V
Average Rectified Output Current @ $T_L = 75^\circ\text{C}$	$I_O$	1.0									A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	40									A
Forward Voltage @ $I_F = 1.0\text{A}$	$V_{FM}$	0.55			0.70		0.85		0.90		V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_{RM}$	0.1 20									mA
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$ $R_{\theta JA}$	28 88									$^\circ\text{C/W}$
Operating Temperature Range	$T_j$	-55 to +150									$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150									$^\circ\text{C}$

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

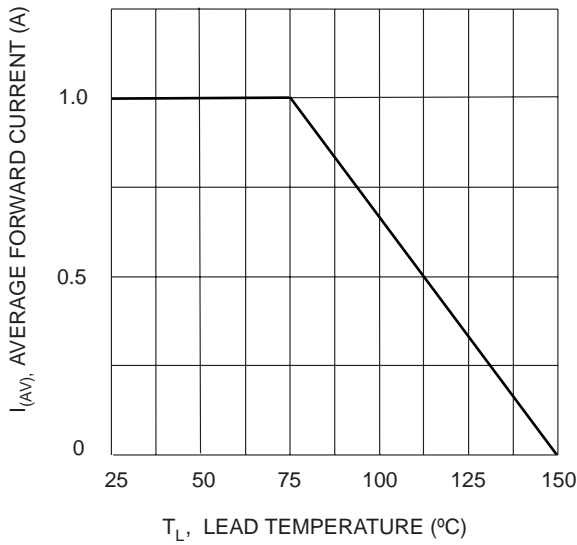


Fig. 1 Forward Current Derating Curve

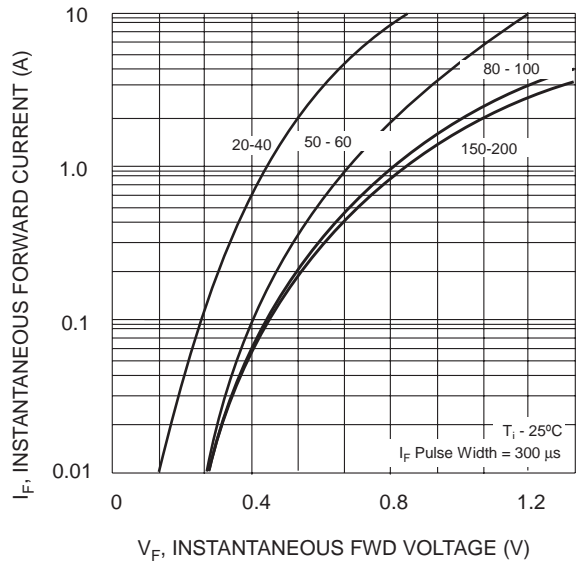


Fig. 2 Typ. Forward Characteristics

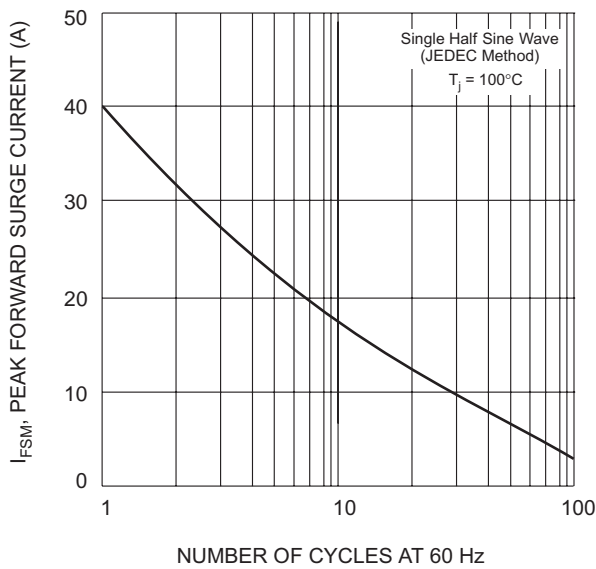


Fig. 3 Max Non Repetitive Peak Fwd Surge Current

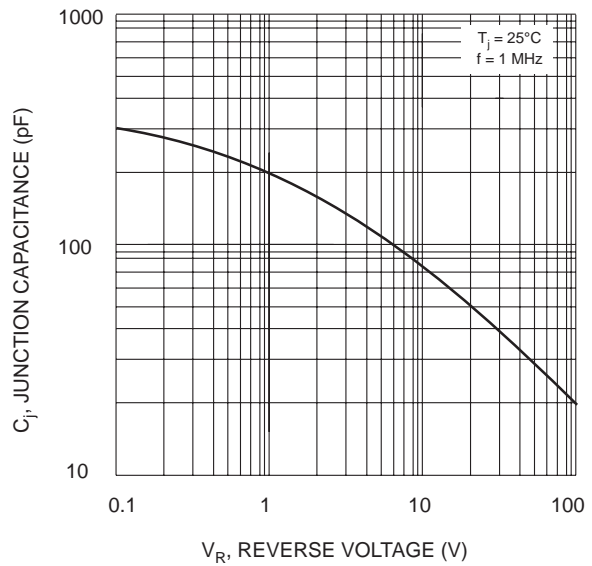


Fig. 4 Typical Junction Capacitance

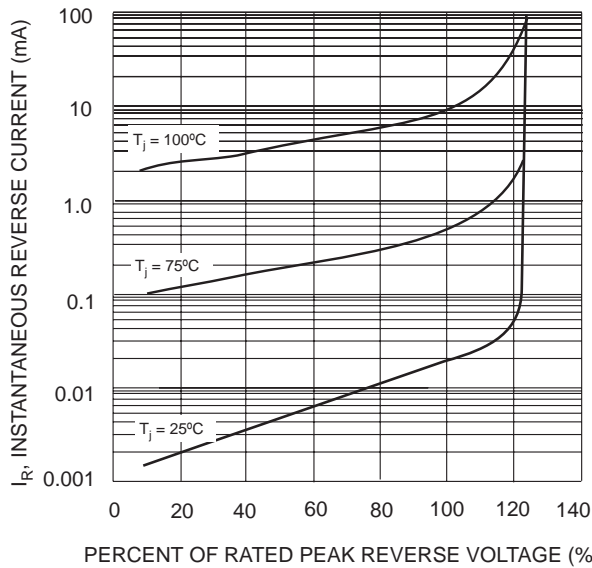


Fig. 5 Typical Reverse Characteristics