

Major Ratings and Characteristics

$I_{F(AV)}$	2.0 A
V_{RRM}	50 V to 1000 V
I_{FSM}	60 A
I_R	5 μ A
V_F	1.1 V
T_j max.	150 °C

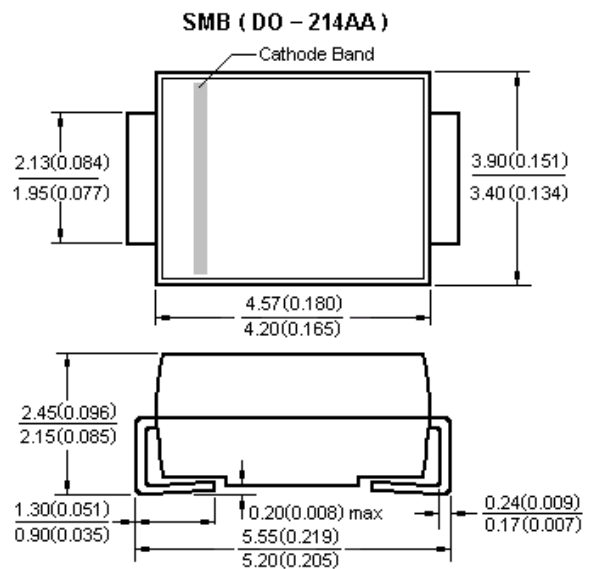


Features

- Low profile space
- Ideal for automated placement
- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering:
260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/1
and WEEE 2002/96/EC

Mechanical Date

- Case: JEDEC DO-214AA molded plastic over glass passivated chip
- Terminals: Solder plated, solderable per J-STD-002B and JESD22-B102D
- Polarity: Laser band denotes cathode end



Maximum Ratings & Thermal Characteristics & Electrical Characteristics

($T_A = 25\text{ °C}$ unless otherwise noted)

	Symbol	BSR2A (S2A)	BSR2B (S2B)	BSR2D (S2D)	BSR2G (S2G)	BSR2J (S2J)	BSR2K (S2K)	BSR2M (S2M)	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	$I_{F(AV)}$	2							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	60							A
Maximum instantaneous forward voltage at 2.0A	V_F	1.1							V
Maximum DC reverse current $T_A = 25\text{ °C}$ at Rated DC blocking voltage $T_A = 125\text{ °C}$	I_R	5.0							μ A
		50							μ A
Typical junction capacitance at 4.0 V ,1MHz	C_J	30							p F
Thermal resistance from junction to ambient	$R_{\theta JA}$	70							°C/ W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							°C

Characteristic Curves ($T_A=25\text{ }^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

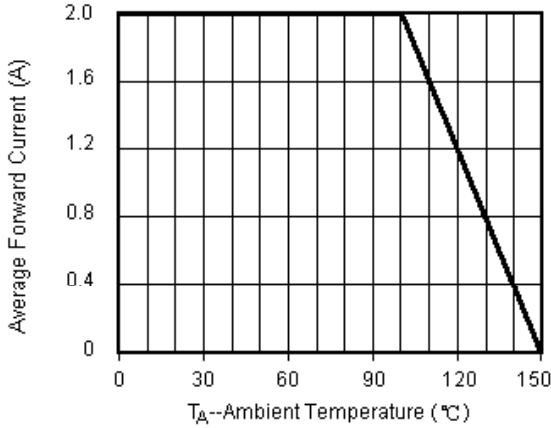


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

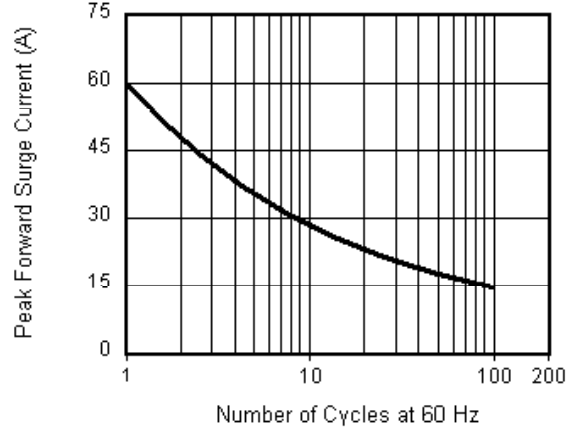


Fig.3 Typical Instantaneous Forward Characteristics

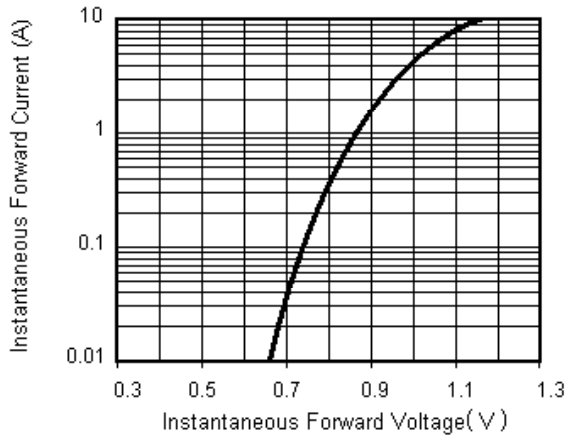


Fig.4 Typical Reverse Leakage Characteristics

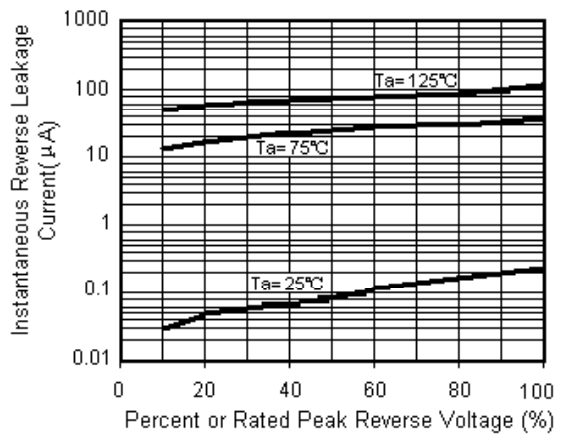


Fig.5 Typical Junction Capacitance

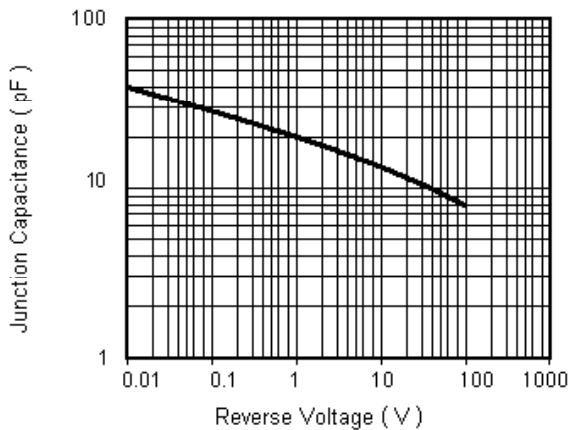


Fig.6 Transient Thermal Impedance

