Schottky Barrier Diode

SS3xB

Features

- The plastic package carries UL Flammability Classification 94V-0
- For surface mounted applications
- Low power loss, high efficiency
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed:260℃/10 seconds at terminals



Mechanical Characteristics

- Case: SMB(DO-214AA) package molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end

Absolute Maximum Ratings and Electrical Parameters (TA=25°C unless otherwise specified)

PARAMETER		SYMBOL	SS32B	SS33B	SS34B	SS35B	SS36B	SS38B	SS310B	SS315B	SS3200B	UNIT
Maximum repetitive peak reverse voltage		V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage		V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage		V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum average forward rectified current		I_{AV}	3									A
Peak forward surge current (NOTE1)		I_{FSM}	80									A
Maximum instantaneous forward voltage at 3A		V_F	0.55			0.7		0.85		0.9		V
Maximum DC reverse current at rated DC blocking voltage	T_A=25 ℃	I_R	100					50		20		uA
	T_A=100 ℃	I_{RT}	10000					5000		2000		uA
Typical junction capacitance (NOTE 2)		C_J	330			270						pF
Typical Thermal Resistance Junction to Ambient (NOTE3)		$R_{\theta JA}$	65									℃/W
Typical Thermal Resistance Junction to Lead (NOTE3)		$R_{\theta JL}$	20									℃/W
Operating Temperature Range		T_J	-55 to 125					-55 to 150				℃
Storage Temperature Range		T_{STG}	-55 to 150									℃

Note1: 8.3ms single half sine-wave superimposed on rated load

Note2: Measured at 1MHz and applied reverse voltage of 4.0V DC.

Note3: PCB. mounted with 7×7mm copper pad areas

Rating And Characteristic Curves (TA=25°C unless otherwise noted)

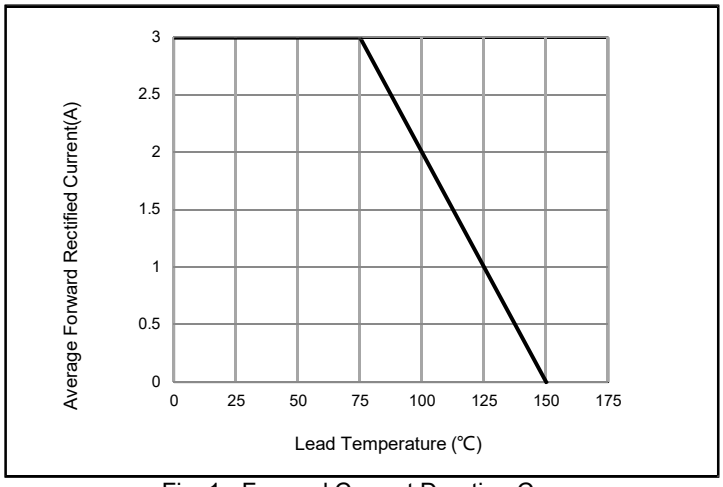


Fig. 1 - Forward Current Derating Curve

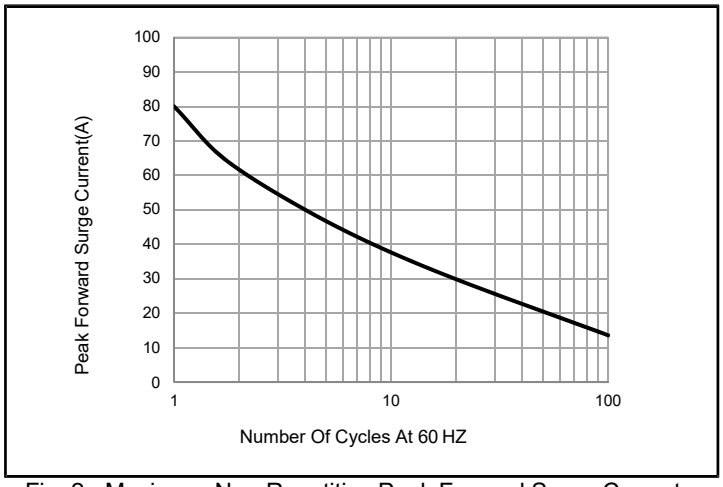


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

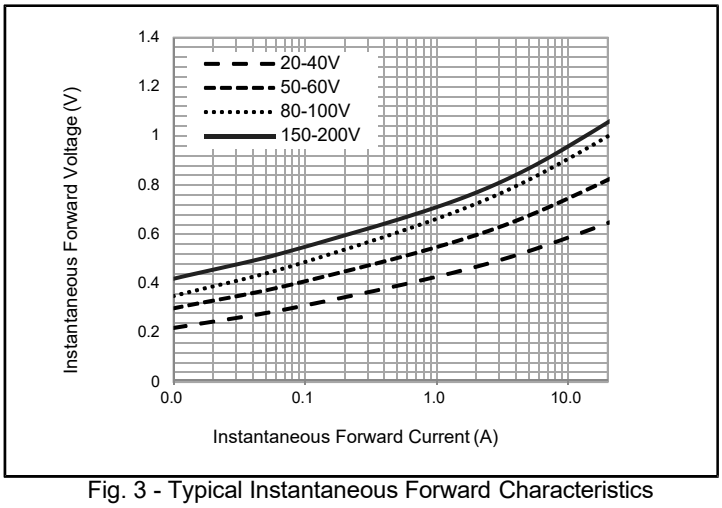


Fig. 3 - Typical Instantaneous Forward Characteristics

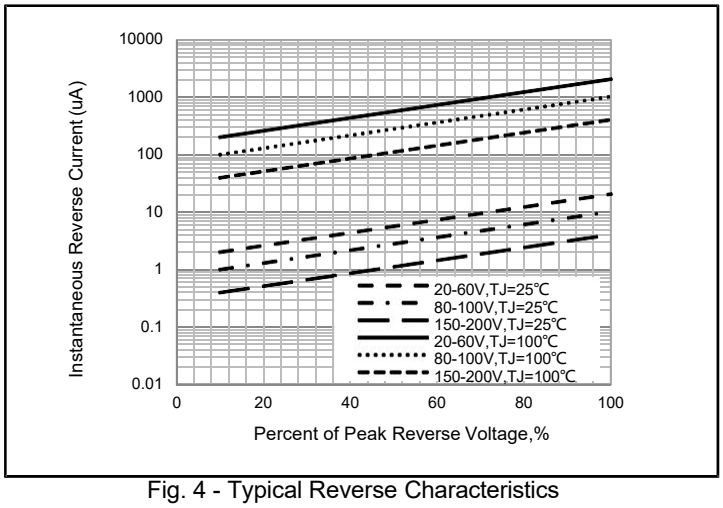


Fig. 4 - Typical Reverse Characteristics

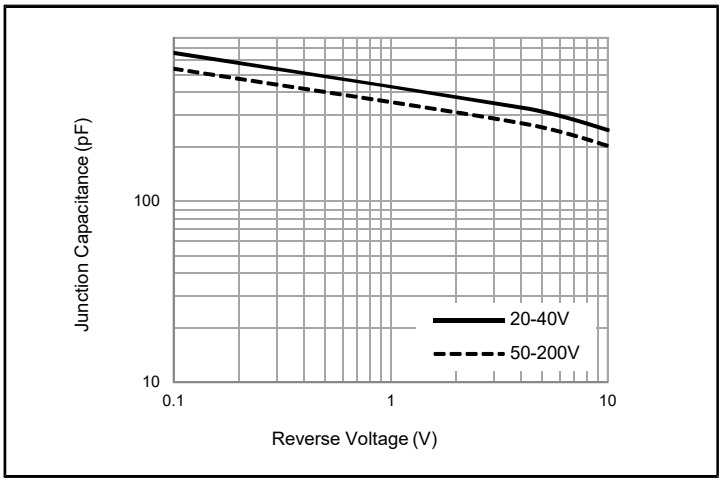


Fig. 5 - Typical Junction Capacitance

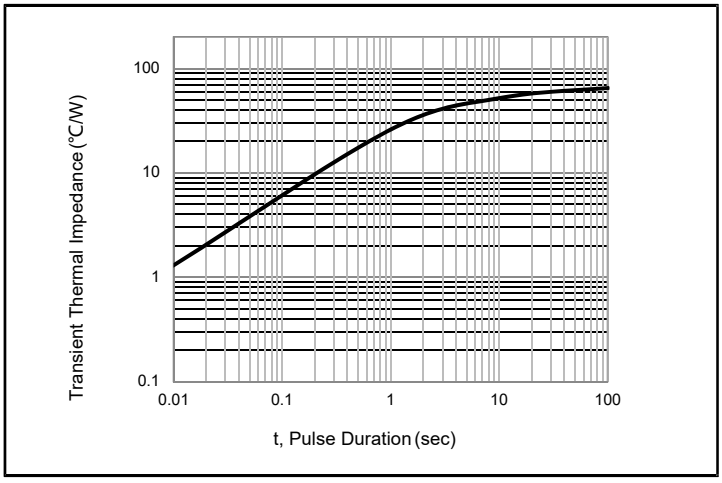
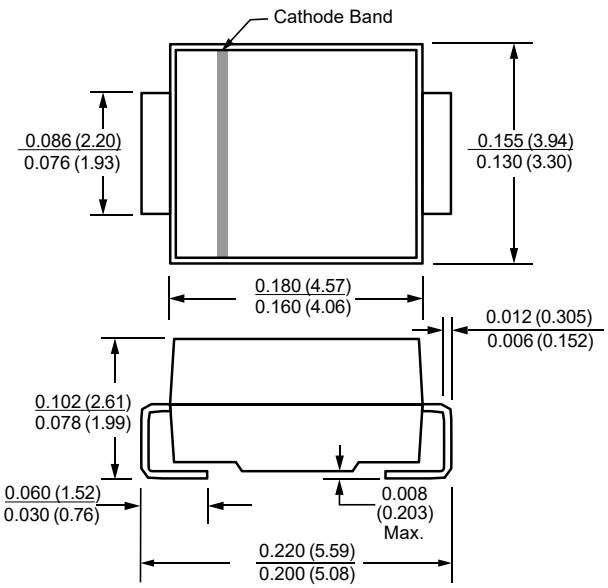


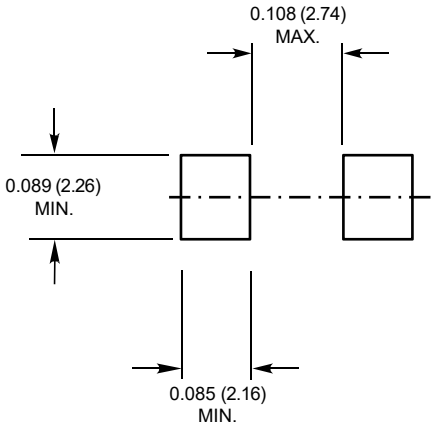
Fig. 6 - Typical Transient Thermal Impedance

Package Outline Dimensions in inches (millimeters)

SMB (DO-214AA)



Mounting Pad Layout



Part Marking System



PDW:Company Logo

XX:Marking Code

Cathode Band
(for uni-directional products only)

Summary of Packing Options

Package	Packing Description	Packing Quantity
SMB	Tape/Reel,13" reel	3000