



SS5150B-SMB-68M

Reverse Voltage - 20 to 200 Volts Forward Current - 5.0 Ampere

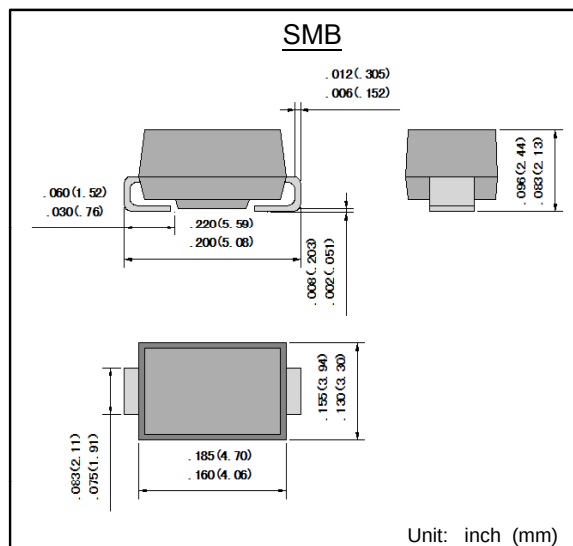
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
250 °C/10 seconds at terminals

Mechanical Data

Case : JEDEC DO-214AA/SMB molded plastic body
Terminals : Solderable per MIL-STD-750, Method 2026
Polarity : Color band denotes cathode end Mounting
Position : Any
Weight : 0.003 ounce, 0.095 grams



Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	SS5150B-SMB-68M	UNITS
Marking Code			
Maximum repetitive peak reverse voltage	V_{RRM}	150	V
Maximum RMS voltage	V_{RMS}	105	V
Maximum DC blocking voltage	V_{DC}	150	V
Maximum average forward rectified current at TL (see fig.1)	I_{AV}	5.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150	A
Maximum instantaneous forward voltage at 5.0A	V_F	0.85	V
Maximum DC reverse current $T_A=25^{\circ}C$ at rated DC blocking voltage $T_A=125^{\circ}C$	I_R	0.3 25	mA
Typical junction capacitance (NOTE 1)	C_J	300	pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	50.0	$^{\circ}C/W$
Operating junction temperature range	T_J	-50 to +150	$^{\circ}C$
Storage temperature range	T_{STG}	-50 to +150	$^{\circ}C$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas



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Typical Characteristics

Fig.1 Forward Current Derating Curve

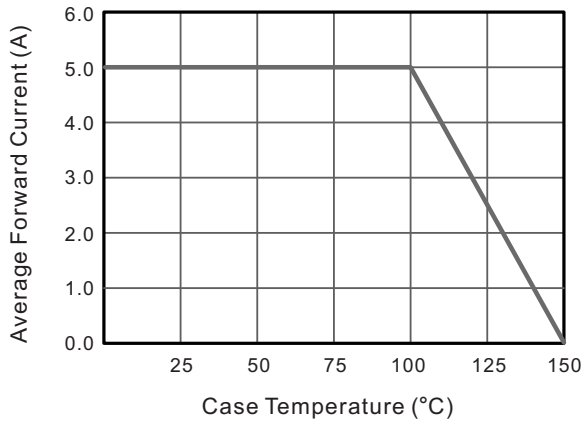


Fig.2 Typical Reverse Characteristics

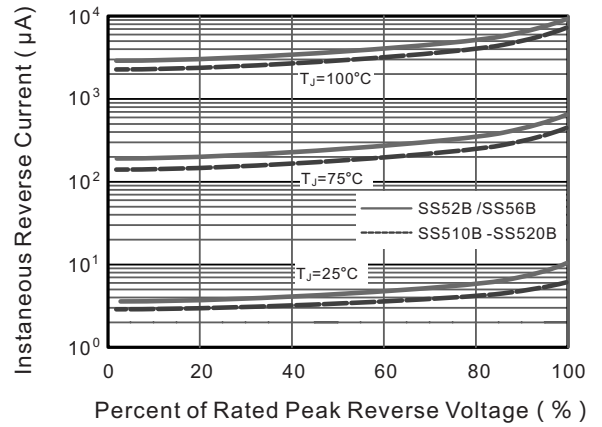


Fig.3 Typical Forward Characteristic

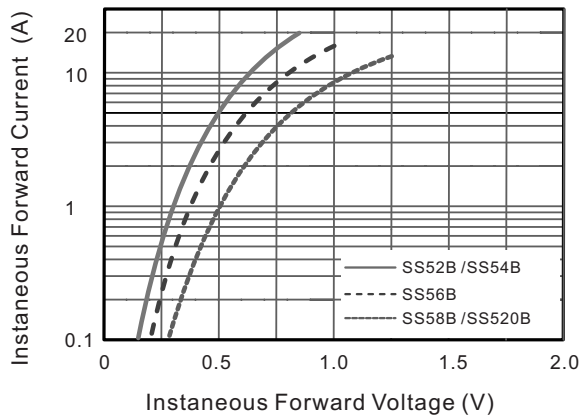


Fig.4 Typical Junction Capacitance

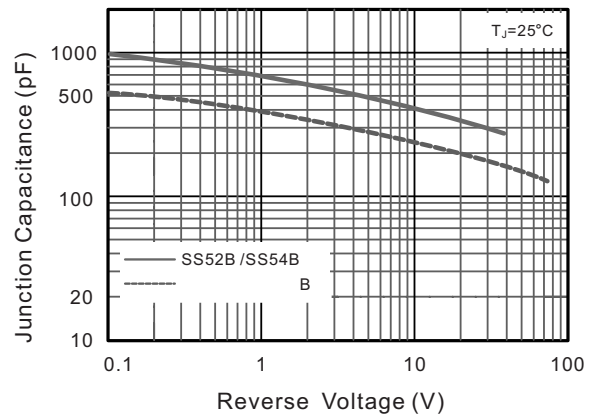


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

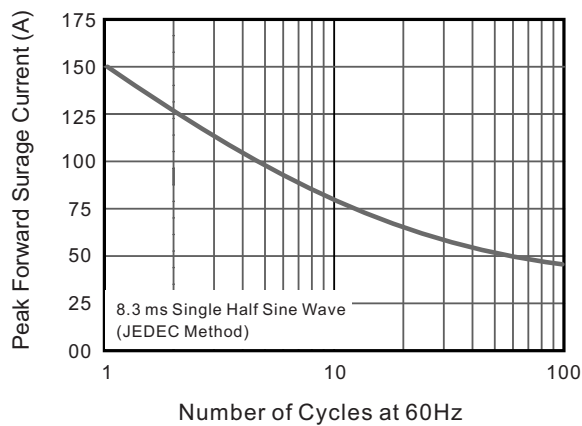
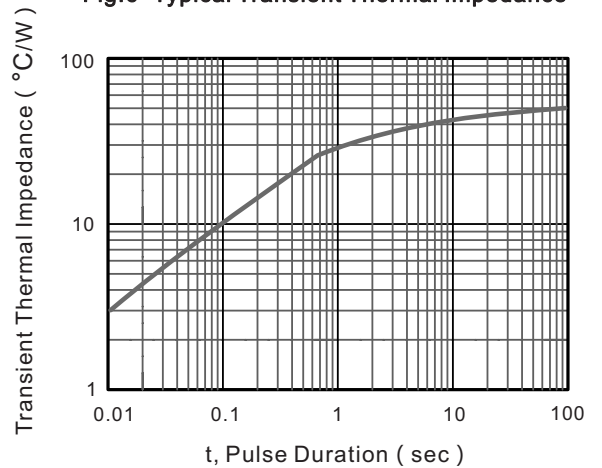


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.