

SB110

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 100V

CURRENT: 1.0A



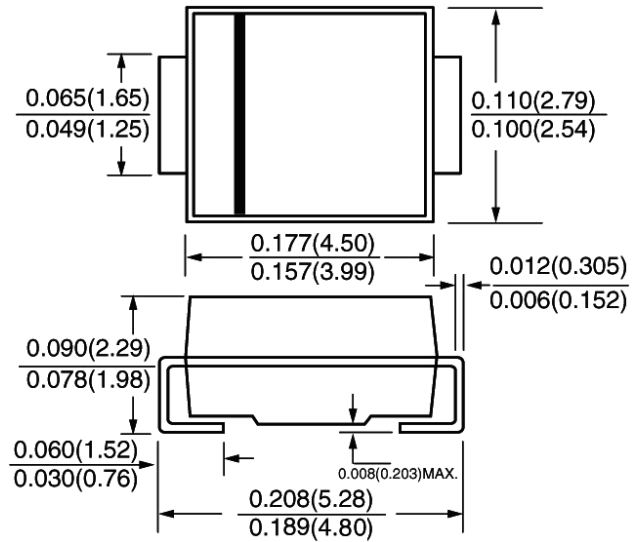
FEATURE

Plastic package has Underwriters Laboratory Flammability Classification 94V-0
For surface mounted applications
Low profile package
Built-in strain relief
Low power loss, high efficiency
High current capability, low forward voltage drop
High surge capability
For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
Guardring for overvoltage protection
High temperature soldering guaranteed:
250°C /10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic body
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Weight: 0.002 ounce, 0.064 gram

SMA/DO-214AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	SB110	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	100	V
Maximum RMS Voltage	V _{rms}	70	V
Maximum DC blocking Voltage	V _{dc}	100	V
Maximum Average Forward Rectified Current 3/8"lead length	I _{f(av)}	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	40.0	A
Maximum Forward Voltage at rated Forward current (Note 1)	V _f	0.80	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	I _r	0.5 10	mA
Typical Thermal Resistance (Note 2)	R _{th(ja)} R _{th(jl)}	88.0 30.0	°C /W
Operating junction and Storage temperature range	T _j , T _{stg}	-55 to +150	°C

NOTE:

1. Pulse test: 300µs pulse width, 1% duty cycle
2. P.C.B. mounted with 0.2 x 0.2inches (5.0 x5.0mm) copper pad areas

Fig. 1 – Forward Current Derating Curve

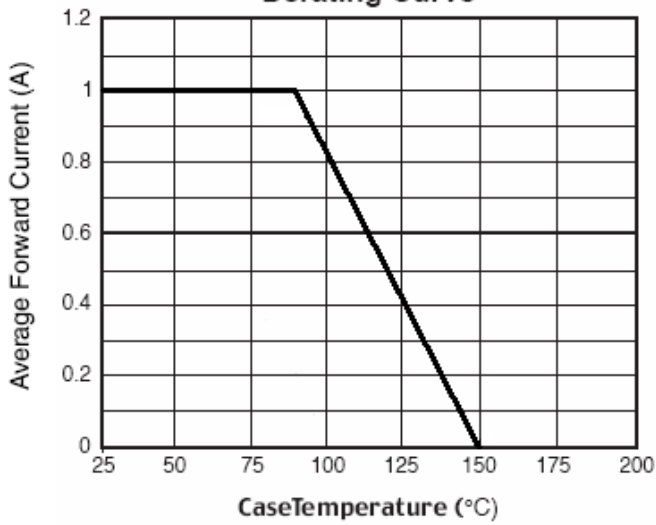


Fig. 2 - Maximum Non-repetitive Surge Current

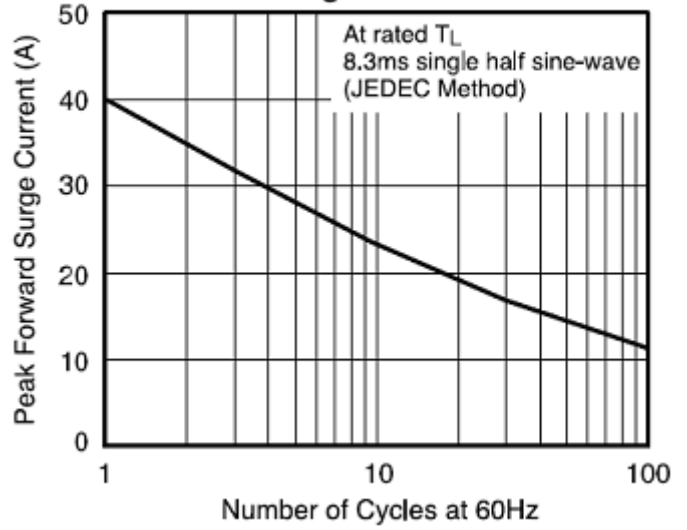


Fig. 3 – Typical Instantaneous Forward Characteristics

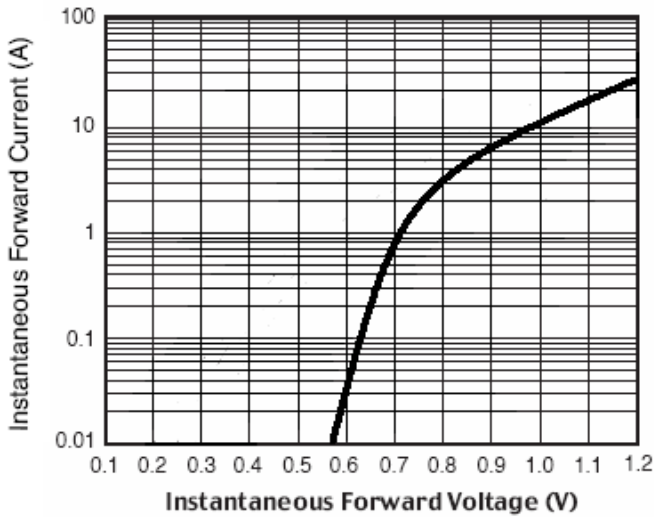


Fig. 4 – Typical Reverse Characteristics

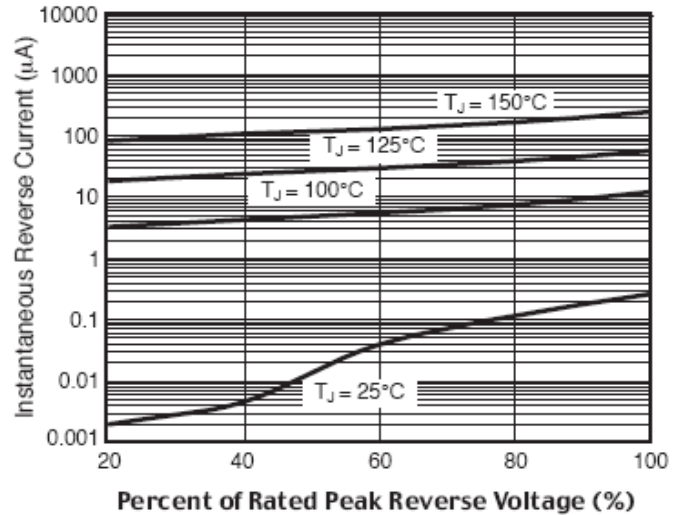


Fig. 5 – Typical Junction Capacitance

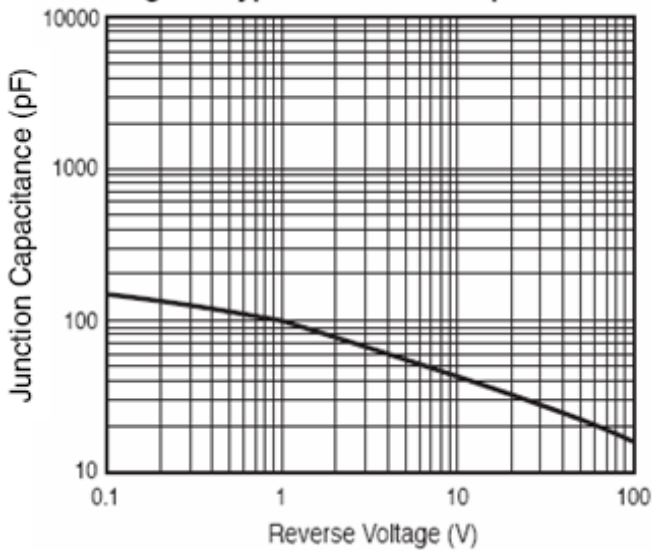


Fig. 6 – Typical Transient Thermal

