

SB315-B-E

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 150V

CURRENT: 3.0A



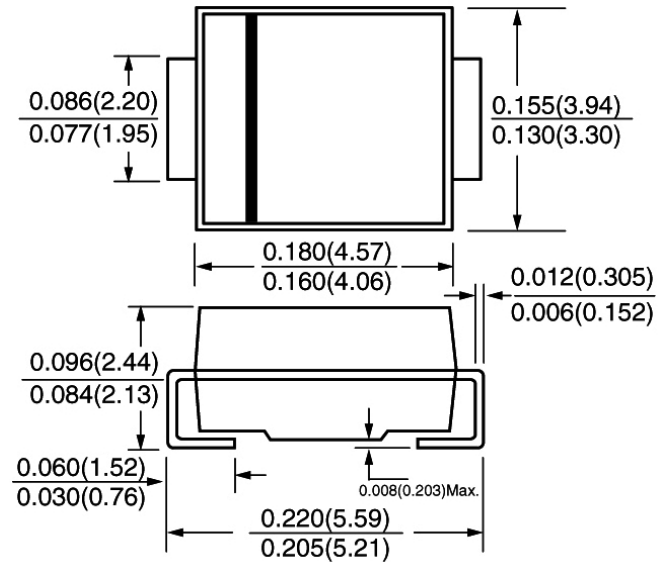
FEATURE

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
Guard ring for over voltage protection
High temperature soldering guaranteed: 250°C /10 seconds at terminals
Halogen Free

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic body
Terminals: Solder plated, solder able per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end

SMB/DO-214AA



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, for capacitive load, derate current by 20%)

	SYMBOL	SB315-B-E	units
Maximum Recurrent 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	I _{f(av)}	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	100.0	A
Maximum Forward Voltage at rated Forward current (Note 1)	V _f	0.85	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	I _r	0.1 2.0	mA mA
Typical Thermal Resistance (Note 2)	R _{th(jl)}	15.0	°C/W
Storage and Operating Temperature Range	T _{stg} , T _j	-55 to +150	°C

Note:

1. Pulse test: 380µs pulse width, 2% duty cycle
2. Junction to leads, lead length=10mm

RATINGS AND CHARACTERISTIC CURVES SB315-B-E

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

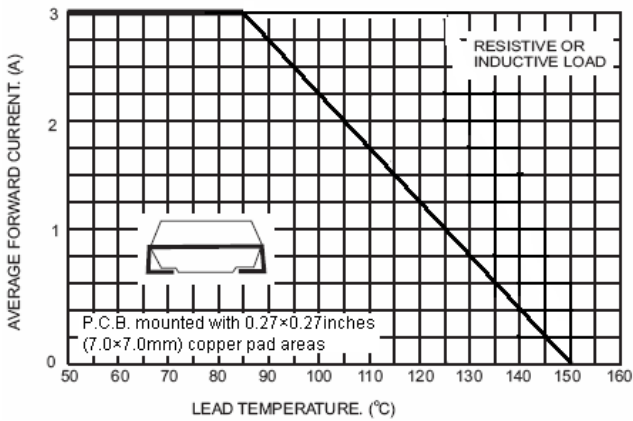


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

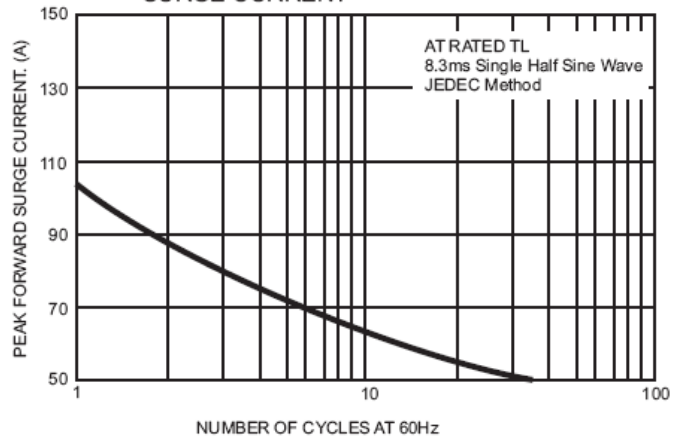


FIG.3- TYPICAL FORWARD CHARACTERISTICS

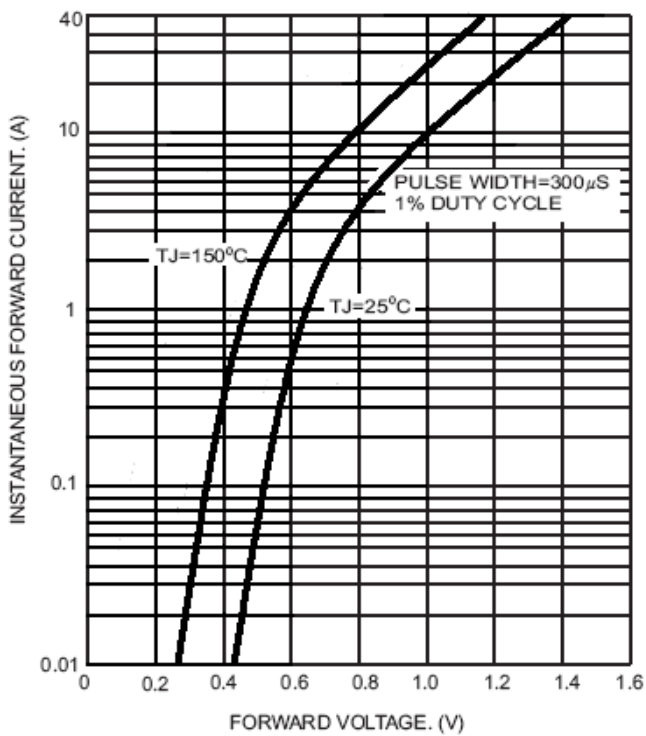


FIG.4- TYPICAL REVERSE CHARACTERISTICS

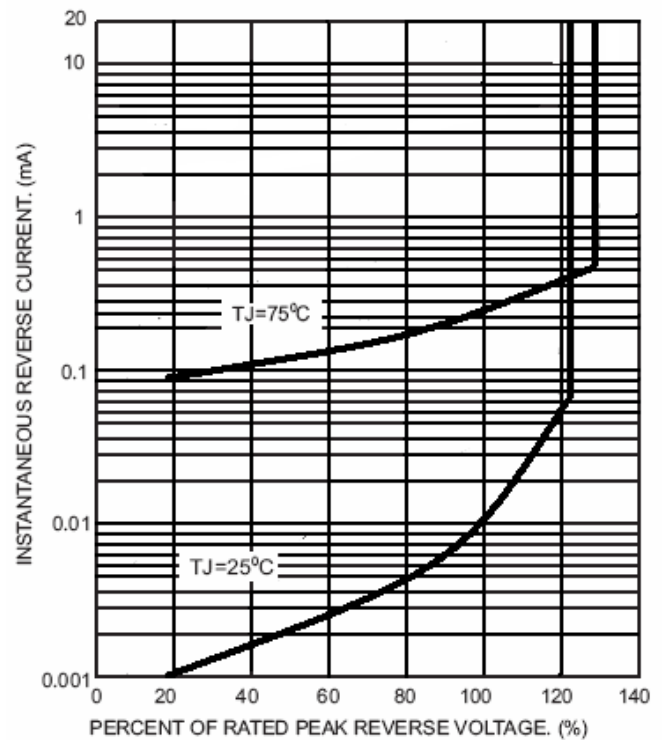


FIG.5- TYPICAL JUNCTION CAPACITANCE

