

SM3150LB



3.0 AMP LOW VF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS



FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Low forward voltage drop

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Metallurgically bonded construction
- * Polarity: Color band denotes cathode end
- * Mounting position: Any

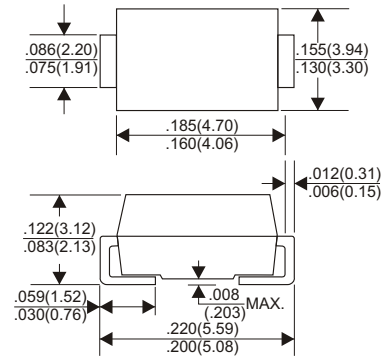
VOLTAGE RANGE

150 Volts

CURRENT

3.0 Amperes

DO-214AA(SMB)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SM3150LB	UNITS
Maximum Recurrent Peak Reverse Voltage	150	V
Maximum RMS Voltage	105	V
Maximum DC Blocking Voltage	150	V
Maximum Average Forward Rectified Current at $T_L=70^\circ\text{C}$	3.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	80	A
Maximum Instantaneous Forward Voltage at 3.0A	0.82	V
Maximum DC Reverse Current Ta=25°C	0.5	mA
at Rated DC Blocking Voltage Ta=100°C	20	mA
Typical Junction Capacitance (Note1)	240	pF
Typical Thermal Resistance RθJA (Note 2)	88.0	°C/W
Operating Temperature Range Tj	-55 — +150	°C
Storage Temperature Range Tstg	-55 — +150	°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (SM3150LB)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

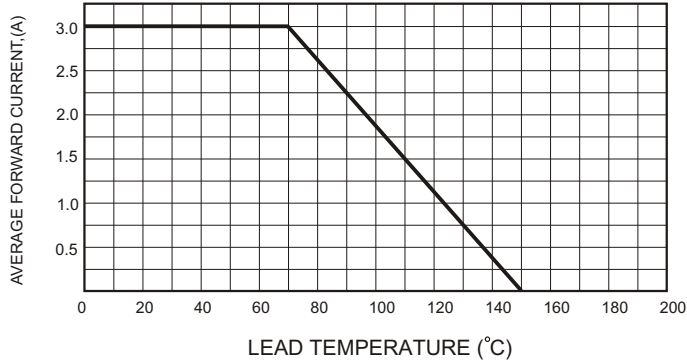


FIG.2-TYPICAL FORWARD CHARACTERISTICS

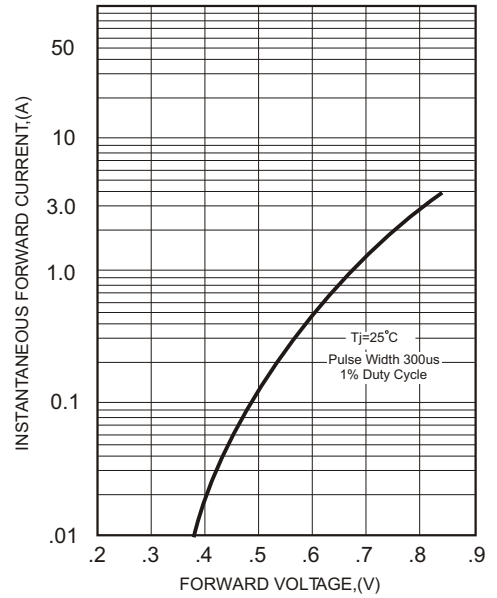


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

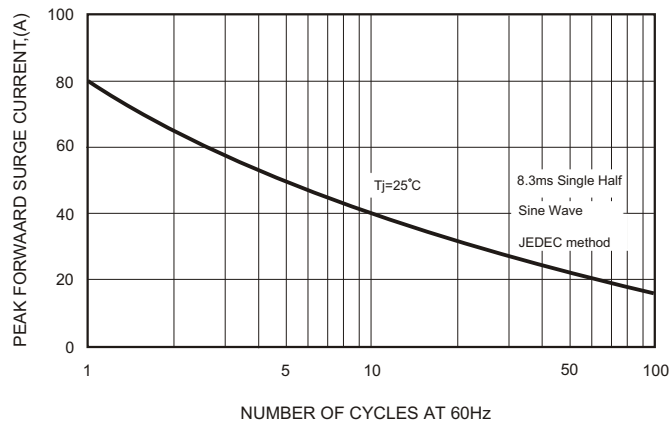


FIG.4-TYPICAL JUNCTION CAPACITANCE

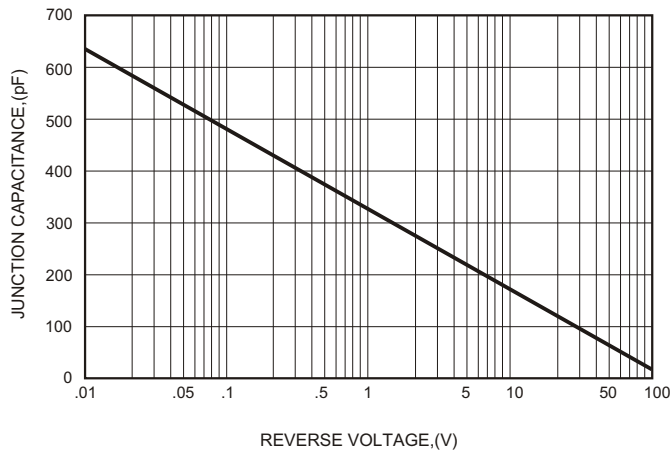


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

