

SB5150

SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 150V

CURRENT: 5.0A

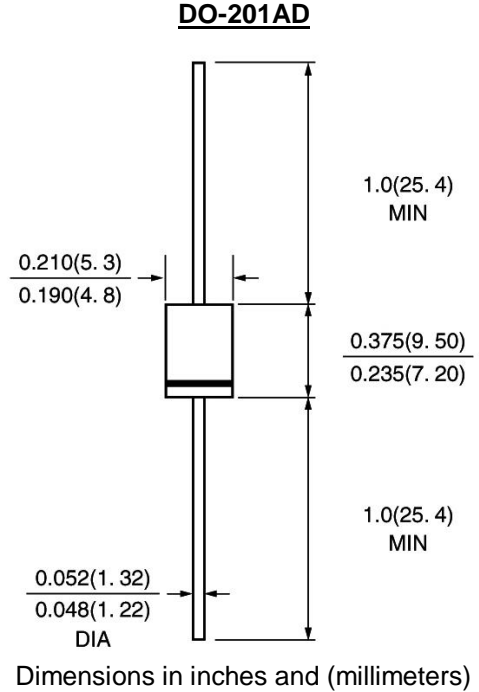


FEATURE

High current capability, Low forward voltage drop
Low power loss, high efficiency
High surge capability
High temperature soldering guaranteed
260°C /10sec/0.375" lead length

MECHANICAL DATA

Terminal: Plated axial leads solderable per J-STD-002
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	SB5150	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	150	V
Maximum DC blocking Voltage	V _{dc}	150	V
Maximum Average Forward Rectified Current 3/8" lead length	I _{f(av)}	5.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	120.0	A
Maximum Forward Voltage at 5.0A (Note 1)	V _f	1.05	V
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =125°C	I _r	0.1 1.0	mA
Typical Thermal Resistance (Note 2)	R _{th(ja)}	10.0	°C /W
Storage and Operating Junction Temperature	T _j , T _{stg}	-65 to +150	°C

Note:

1. Pulse test: 300µs pulse width, 1% duty cycle
2. Thermal Resistance from Junction to Ambient at 0.5" lead length, vertical P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES SB5150

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

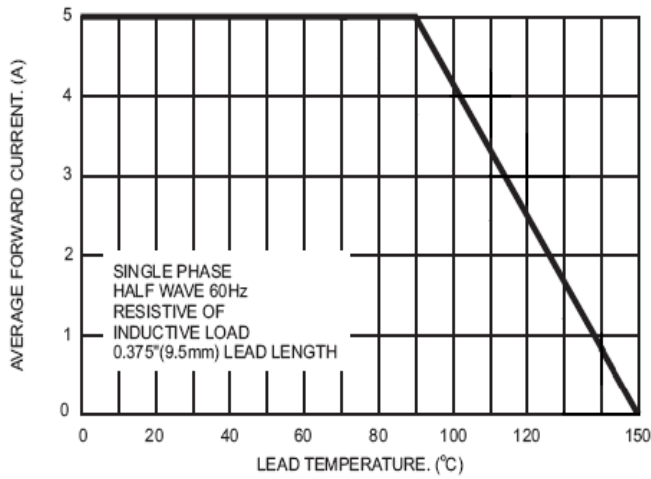


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

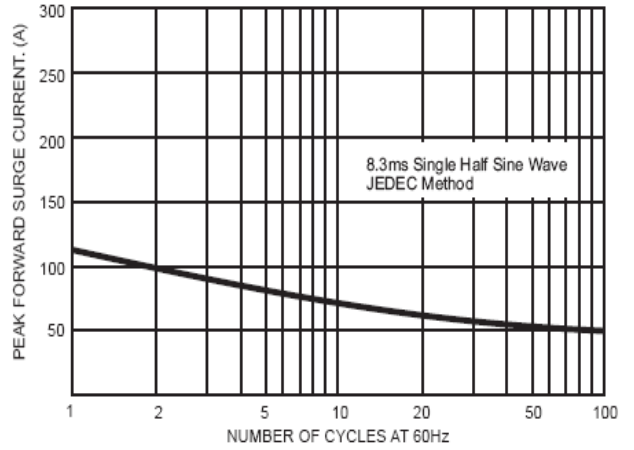


FIG.3- TYPICAL FORWARD CHARACTERISTICS

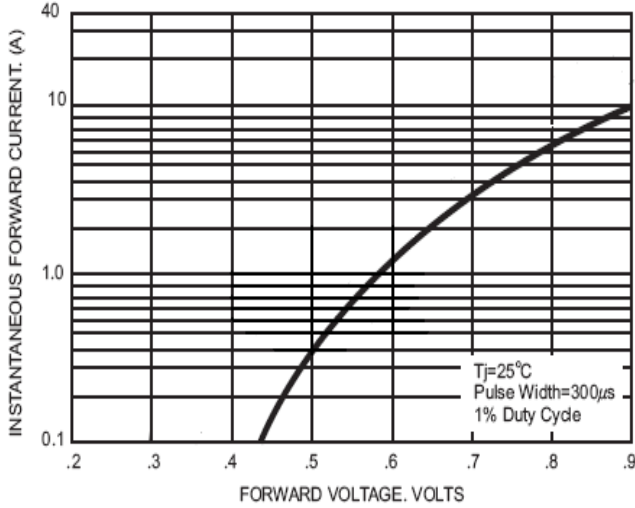


FIG.4- TYPICAL REVERSE CHARACTERISTICS

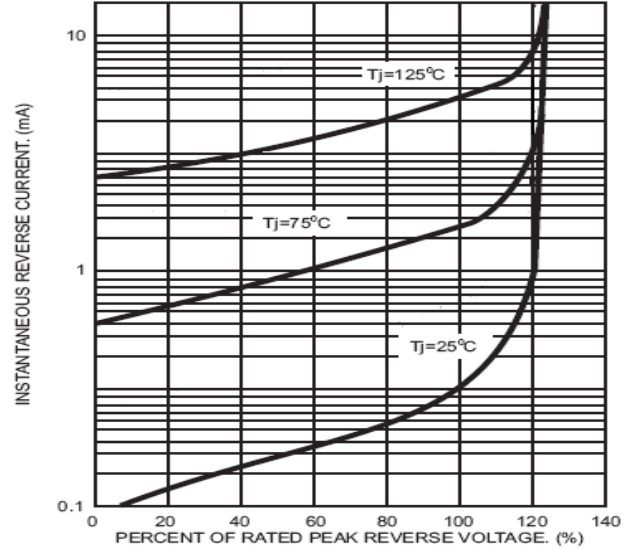


FIG.5- TYPICAL JUNCTION CAPACITANCE

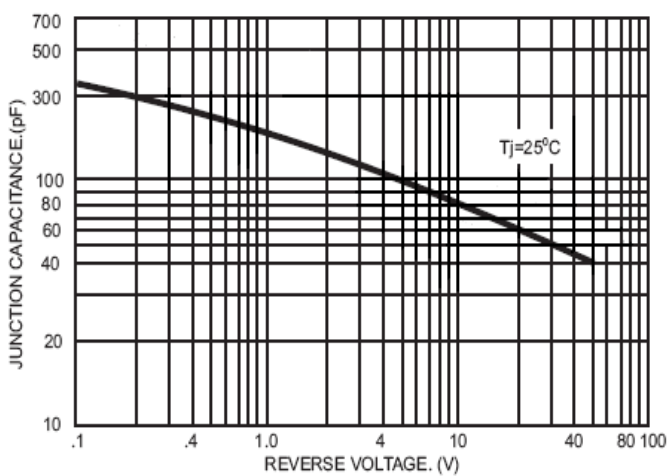


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS

