

**SCHOTTKY BARRIER RECTIFIER**

**REVERSE VOLTAGE – 150 Volts**  
**FORWARD CURRENT – 3.0 Amperes**

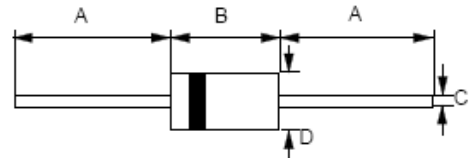
**FEATURES**

- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection application

**MECHANICAL DATA**

- Case: JEDEC DO-201AD molded plastic
- Polarity: Color band denotes cathode
- Weight: 1.0675 grams (Approximate)
- Mounting position: Any

**DO-201AD**



DO-201AD		
Dim.	Min.	Max.
A	25.4	-
B	7.30	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in millimeter		

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

**ABSOLUTE RATINGS**

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	150	V
Maximum RMS Voltage	$V_{RMS}$	105	V
Maximum DC blocking voltage	$V_{DC}$	150	V
Average rectified forward current	$I_{(AV)}$	3.0	A
Peak forward surge 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	80	A
Operating and Storage temperature range	$T_J, T_{STG}$	-55 ~ +175	°C

**STATIC ELECTRICAL CHARACTERISTICS**

PARAMETER	TEST CONDITION	SYMBOL	TYP	MAX	UNIT
Forward voltage	$I_F = 3A$ $T_J = 25^\circ C$	$V_F$	--	0.95	V
Reverse leakage current	$V_R = 150V$ $T_J = 25^\circ C$ $T_J = 150^\circ C$	$I_R$	--	0.01 20	mA
Typical junction capacitance (Note 1)		$C_J$		105	pF

**THERMAL PERFORMANCE**

PARAMETER	SYMBOL	TYP	UNIT
Typical thermal resistance (Note 2,3)	$R_{thJc}$ $R_{thJA}$	12 35	°C/W

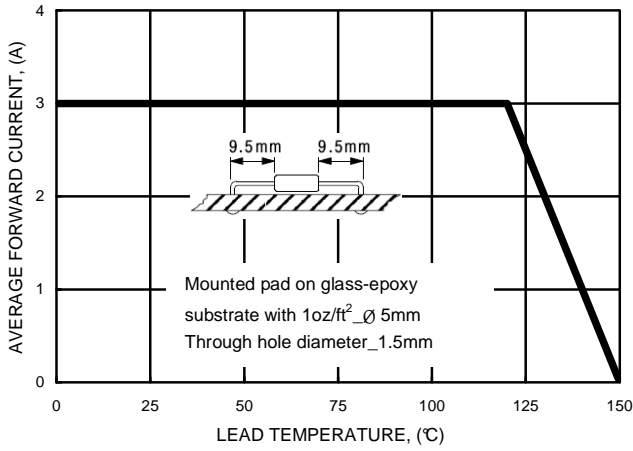
**Note :**

- (1) Measured at 1.0MHz and applied reverse voltage of 4.0 VDC
- (2) Thermal Resistance Junction to Lead
- (3) Thermal Resistance Junction to Case

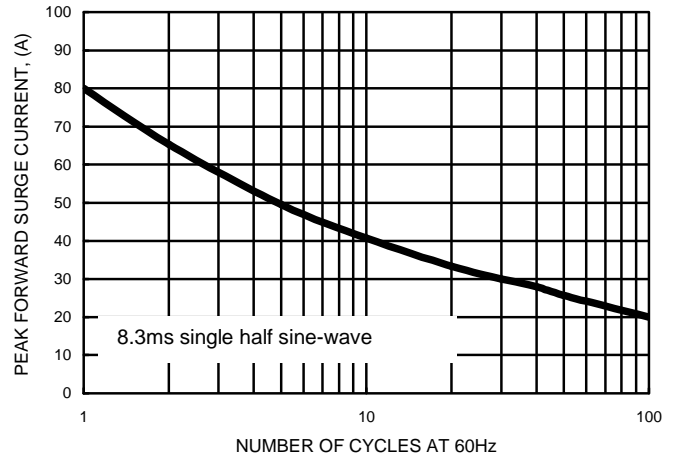
# RATING AND CHARACTERISTIC CURVES SB3150



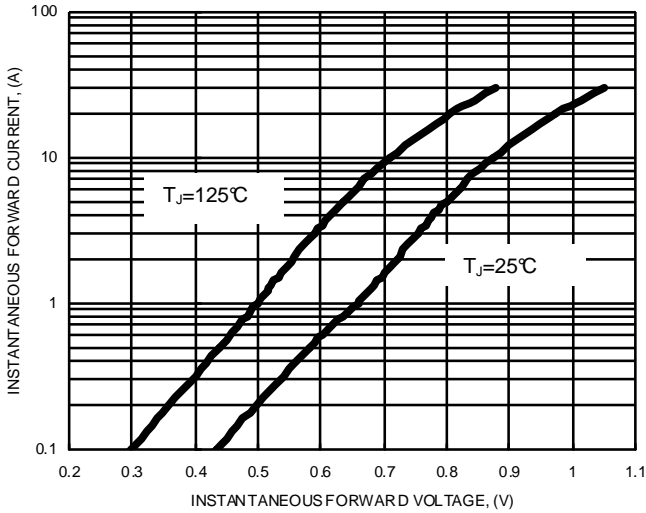
**FIG.1- FORWARD CURRENT DERATING CURVE**



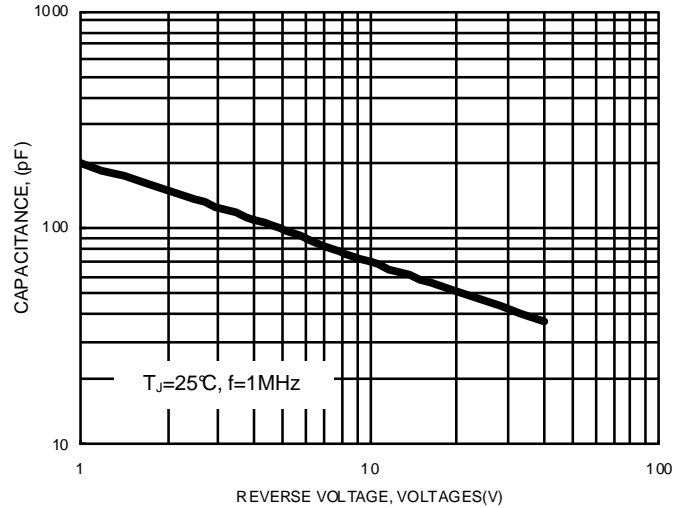
**FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT**



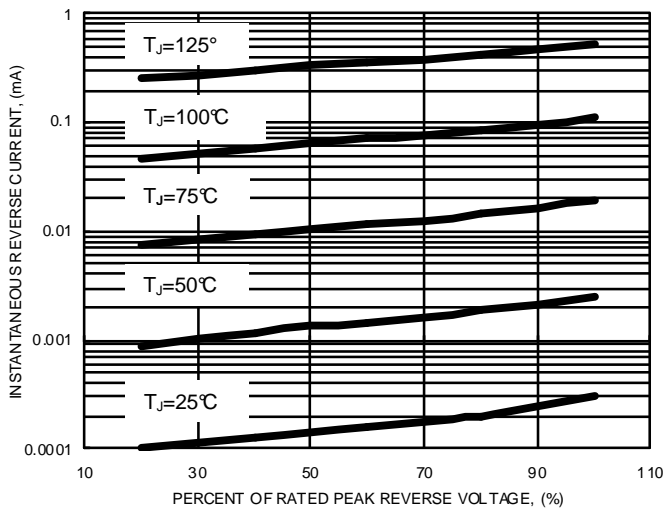
**FIG.3- TYPICAL FORWARD CHARACTERISTICS**



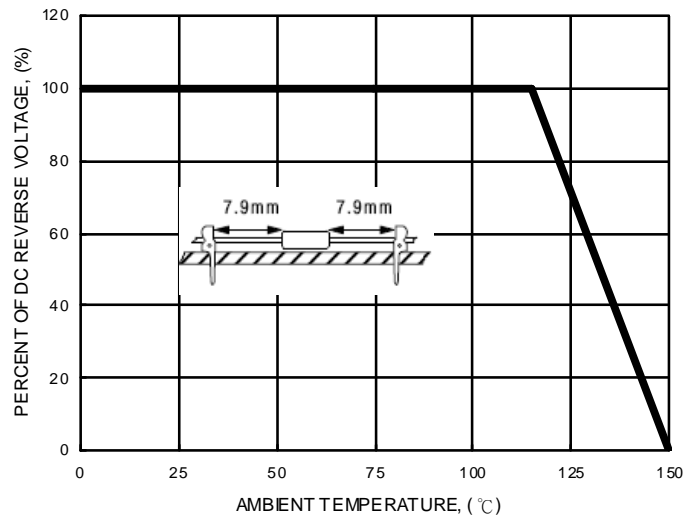
**FIG.4- TYPICAL JUNCTION CAPACITANCE**



**FIG.5- TYPICAL REVERSE CHARACTERISTICS**



**FIG.6- DC REVERSE VOLTAGE DERATING CURVE**



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