

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - **70 to 100** Volts
FORWARD CURRENT - **5.0** Amperes

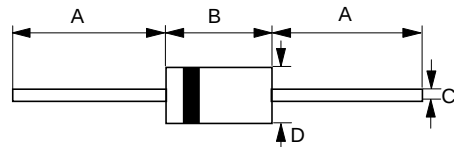
FEATURES

- 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 applications

MECHANICAL DATA

- Case : JEDEC DO-201AD molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.04 ounces, 1.1 grams
- 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.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	SB570	SB580	SB590	SB5100	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	70	80	90	100	V
Maximum RMS Voltage	V_{RMS}	49	56	63	70	V
Maximum DC Blocking Voltage	V_{DC}	70	80	90	100	V
Maximum Average Forward Rectified Current @ $T_L=90^\circ\text{C}$	$I_{(AV)}$	5.0				A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	I_{FSM}	125				A
Maximum forward Voltage at 5.0A DC @ $T_J=25^\circ\text{C}$ @ $T_J=100^\circ\text{C}$	V_F	0.85 0.75				V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_J=25^\circ\text{C}$ @ $T_J=100^\circ\text{C}$	I_R	0.5 50				mA
Typical Junction Capacitance (Note 1)	C_J	135				pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	6				°C/W
Operating Temperature Range	T_J	-55 to +125				°C
Storage Temperature Range	T_{STG}	-55 to +150				°C

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2.Thermal Resistance Junction to Lead.

REV. 0, 11-Apr-2001, KDHF06

FIG.1 - FORWARD CURRENT DERATING CURVE

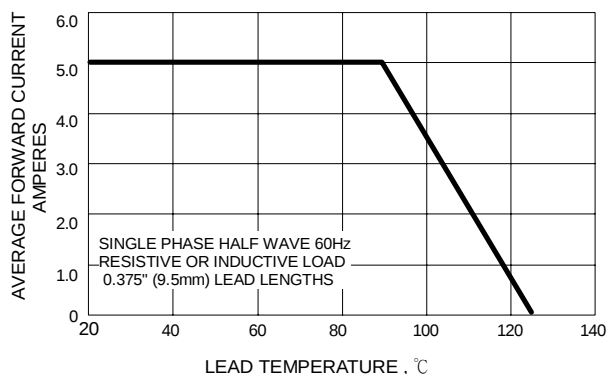


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

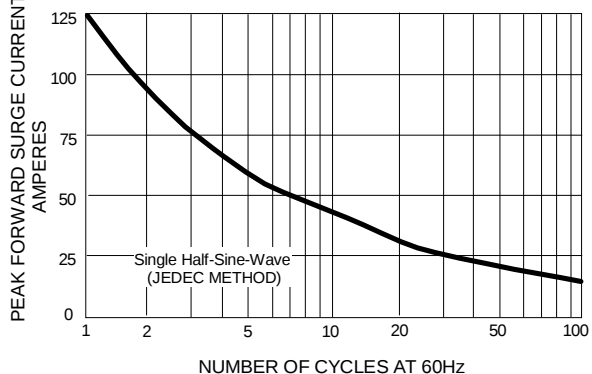


FIG.3 - TYPICAL JUNCTION CAPACITANCE

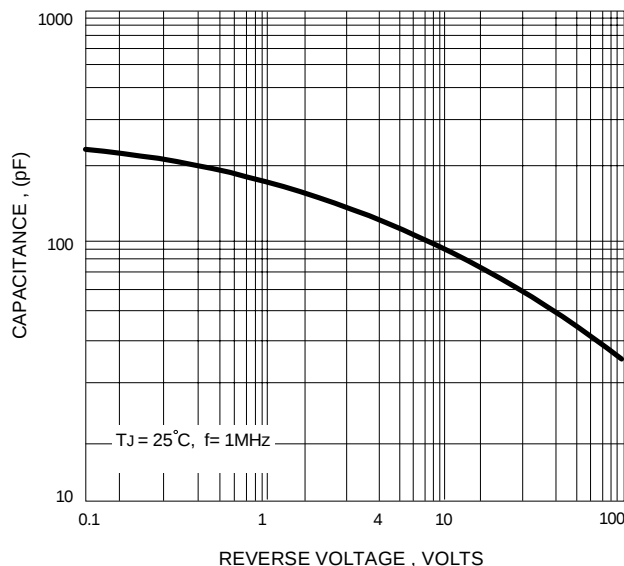


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

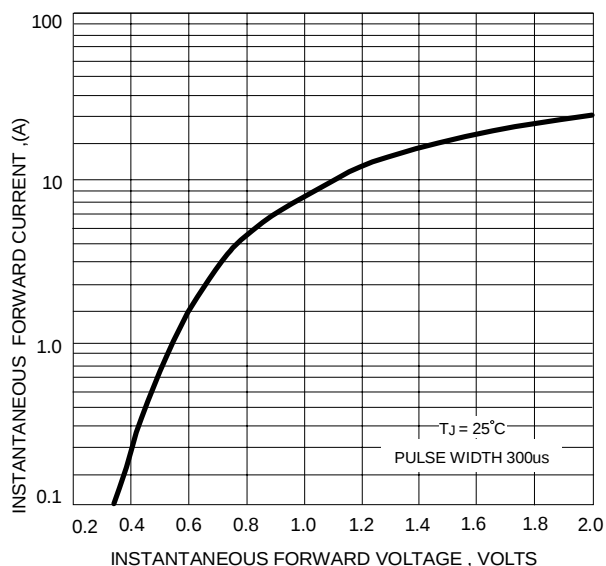


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

