

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - **70 to 100** Volts
FORWARD CURRENT - **2.0** Amperes

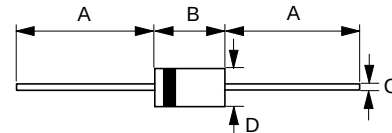
FEATURES

- 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-41 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.012 ounces, 0.34 grams
- Mounting position : Any

DO-15



Dim.	DO-41	
	Min.	Max.
A	25.4	-
B	4.10	5.20
C	0.71 $\varnothing$	0.86 $\varnothing$
D	2.00 $\varnothing$	2.70 $\varnothing$
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	SB270	SB280	SB290	SB2100	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 @ $T_A=75^{\circ}C$	$I_{(AV)}$	2.0				A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	I_{FSM}	60				A
Maximum forward Voltage at 2.0A DC @ $T_J=25^{\circ}C$ @ $T_J=100^{\circ}C$	V_F	0.79 0.69				V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_J=25^{\circ}C$ @ $T_J=100^{\circ}C$	I_R	0.5 10				mA
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	20				$^{\circ}C/W$
Typical Junction Capacitance (Note 2)	C_J	250				pF
Operating Temperature Range	T_J	-55 to +125				$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150				$^{\circ}C$

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

REV. 2, 13-Sep-2000

FIG.1 - FORWARD CURRENT DERATING CURVE

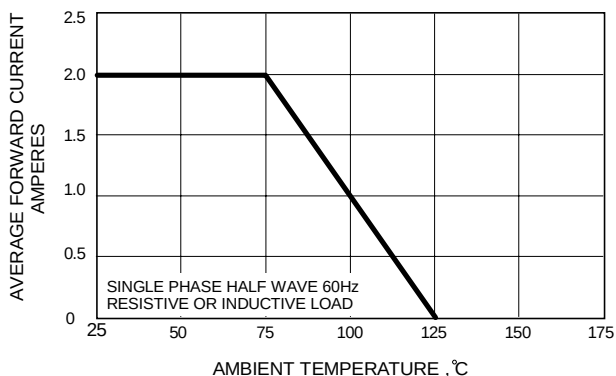


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

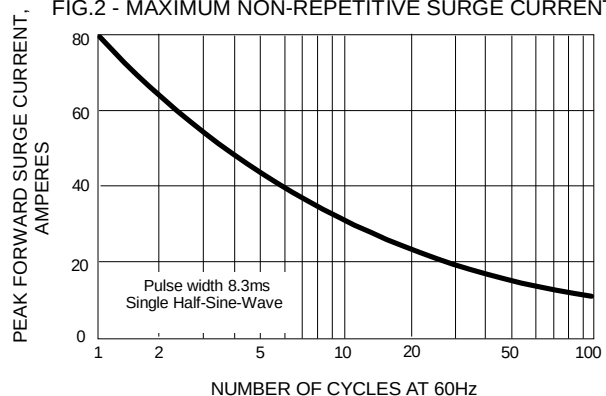


FIG.3 - TYPICAL JUNCTION CAPACITANCE

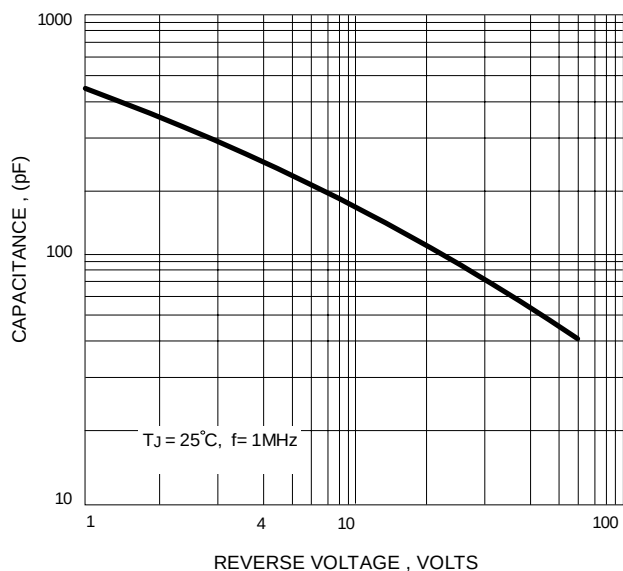


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

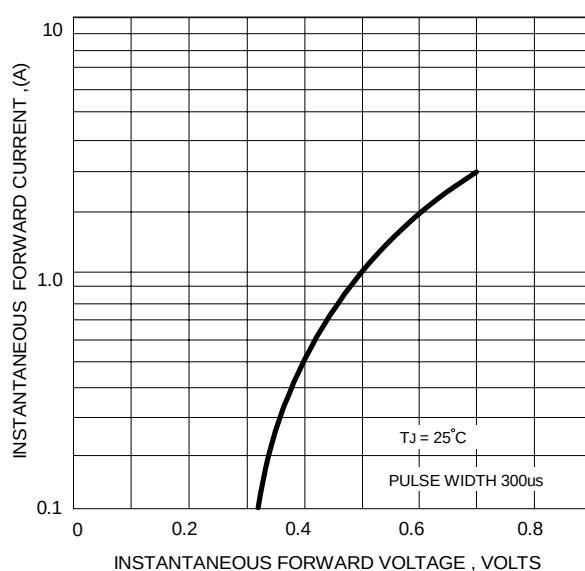


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

