

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - **70 to 100** Volts
FORWARD CURRENT - **1.0** Ampere

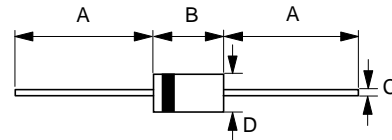
FEATURES

- 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-41



DO-41		
Dim.	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	SB170	SB180	SB190	SB1100	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 .375"(9.5mm) Lead Lengths @T _L =100°C	I _(AV)	1.0				A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	I _{FSM}	40				A
Maximum Forward Voltage at I _F =1.0A,T _J =25°C I _F =1.0A,T _J =100°C	V _F	0.79 0.69				V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =100°C	I _R	0.2 2.0				mA
Typical Junction Capacitance (Note 1)	C _J	30				pF
Typical Thermal Resistance (Note 2)	R _{θJL}	50				°C/W
Operating Temperature Range	T _J	-55 to +150				°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. 4, Apr-2005, KDHC03

FIG.1 - FORWARD CURRENT DERATING CURVE

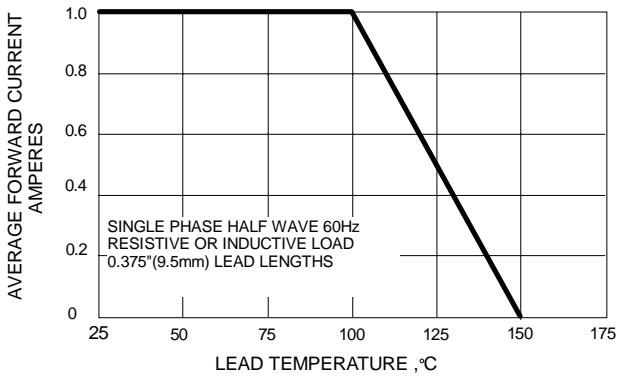


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

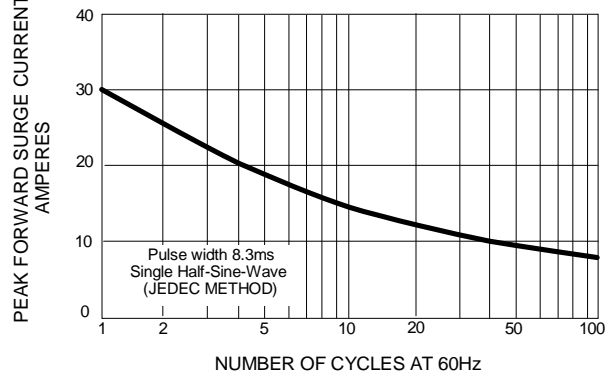


FIG.3 - TYPICAL JUNCTION CAPACITANCE

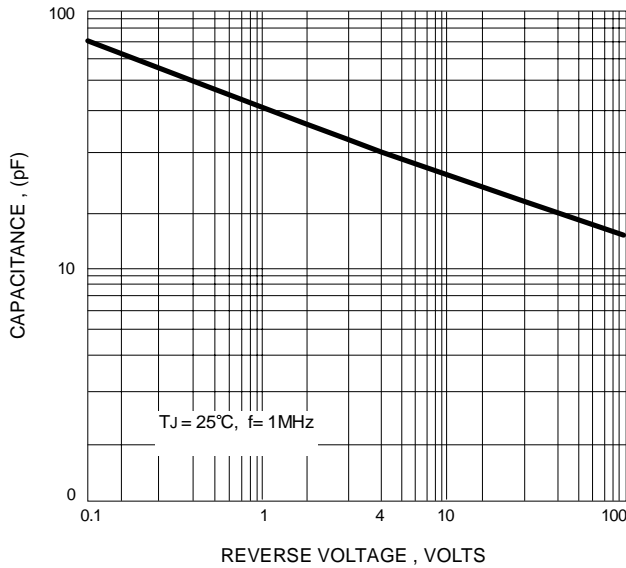


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

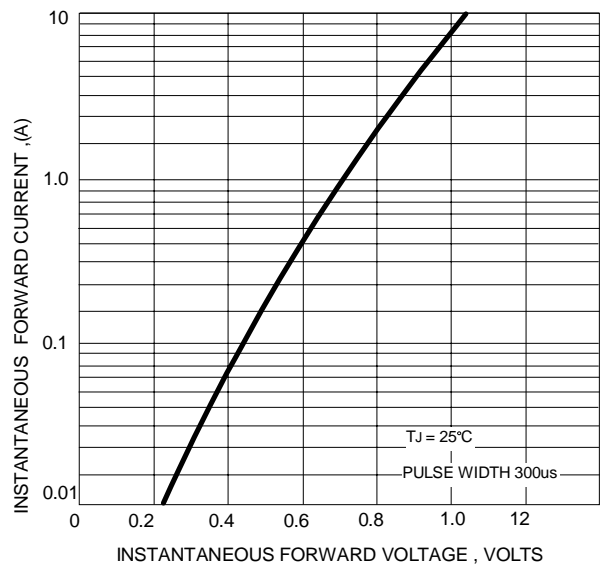


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

