

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - **20 to 60** Volts
FORWARD CURRENT - **1.0** Ampere

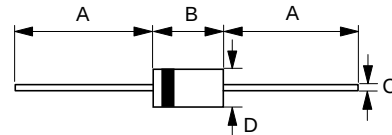
FEATURES

- 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	SB120	SB130	SB140	SB150	SB160	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	V
Maximum RMS Voltage	VRMS	14	21	28	35	42	V
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Lengths @TL=100 °C	l(AV)	1.0					A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	IFSM	40					A
Maximum forward Voltage at 1.0A DC	VF	0.50			0.70		V
Maximum DC Reverse Current @TJ=25 °C at Rated DC Blocking Voltage @TJ=100 °C	IR	0.5 10					mA
Typical Junction Capacitance (Note 1)	CJ	110			80		pF
Typical Thermal Resistance (Note 2)	RθJL	15					°C/W
Operating Temperature Range	TJ	-55 to +125					°C
Storage Temperature Range	TSTG	-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. 2, 01-Dec-2000, KDHC02

FIG.1 - FORWARD CURRENT DERATING CURVE

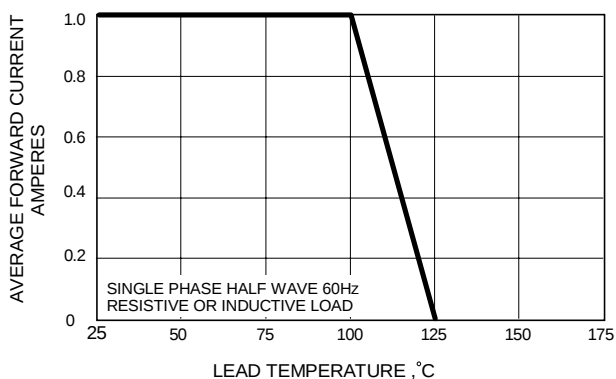


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

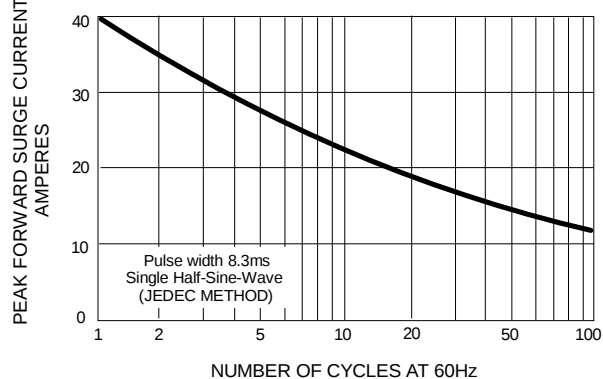


FIG.3 - TYPICAL JUNCTION CAPACITANCE

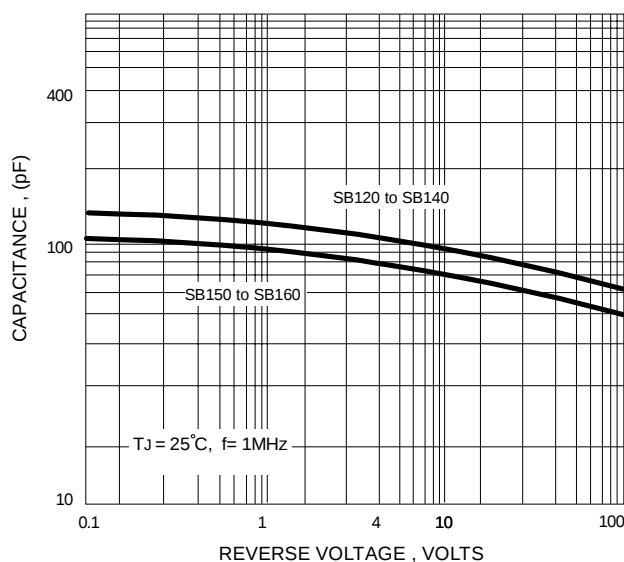


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

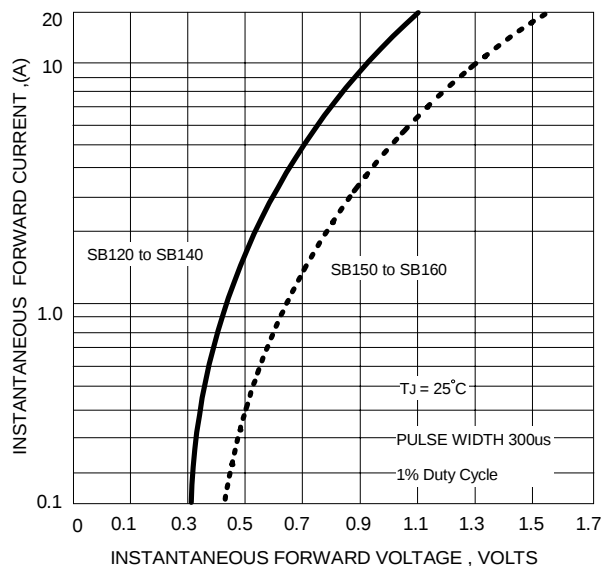


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

