

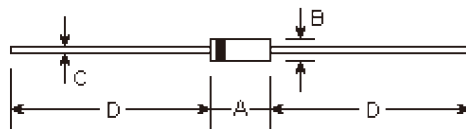


**REVERSE VOLTGE 20V~200V,
FORWARD CURRENT 1.0AMP Schottky Barrier Rectifiers**

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
Flame retardant epoxy molding compound
- 1.0 ampere operation at $T_L=90^{\circ}\text{C}$ with no thermal runaway
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications

DO-41



Mechanical Data

- **Case:** Molded plastic, DO-41
- **Terminals:** Axial leads, solderable per MIL-STD-202, method 208
- **Polarity:** Color band denotes cathode
- **Mounting Position:** Any
- **Weight:** 0.012 ounce, 0.33 gram

DIMENSIONS					
DIM	inches		mm		Note
	Min.	Max.	Min.	Max.	
A	0.165	0.205	4.2	5.2	
B	0.079	0.106	2.0	2.7	ϕ
C	0.028	0.034	0.71	0.86	ϕ
D	1.000	-	25.40	-	

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.

MAXIMUM RATINGS (TA=25°C unless otherwise noted)												
PARAMETER	SYMBOL	SB 120	SB 130	SB 140	SB 150	SB 160	SB 180	SB 1100	SB 1150	SB 1200	UNIT	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V	
Maximum average forward rectified current	I_F	1.0									A	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0									A	
Maximum Instantaneous Forward Voltage IF=1A @ 25°C	V_F	0.5			0.70		0.85		0.87	0.90	V	
Maximum DC Reverse Current @ Tc=25°C at Rated DC Blocking Voltage @ Tc=100°C	I_R	0.5 10					0.2 2.0				mA	
Typical Junction Capacitance(NOTE1)	C_j	90	70		60		50		35		pF	
Typical Thermal Resistance	$R_{\theta Ja}$	70									°C/W	
Operating Temperature Range	T_J	-55 to +125					-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



RATINGS AND CHARACTERISTIC CURVES

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

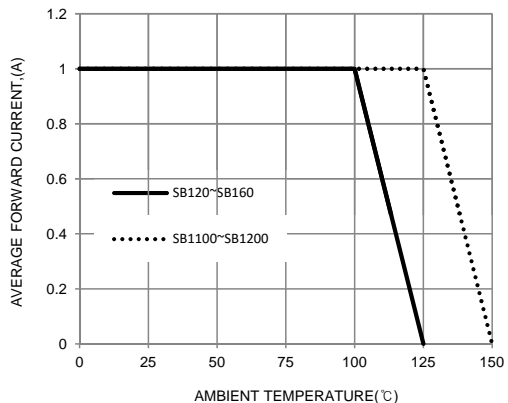


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

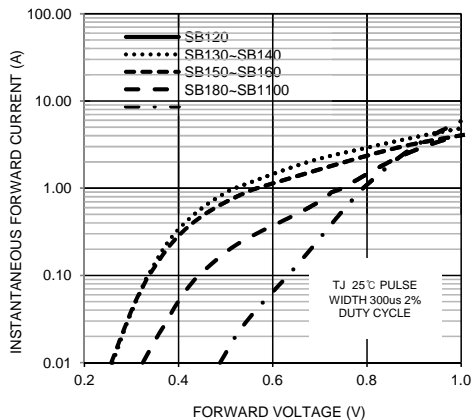


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

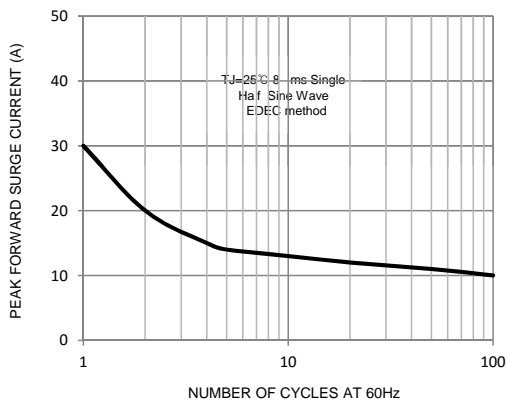


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

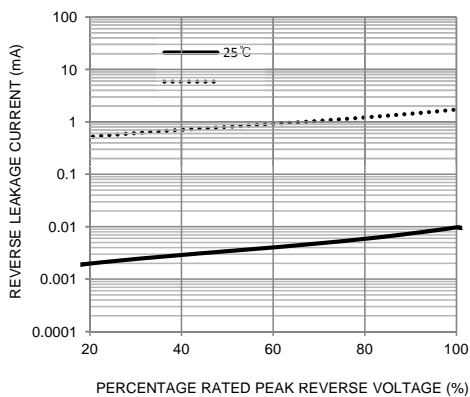


FIG. 5-TYPICAL JUNCTION CAPACITANCE

