SB270 thru SB2B0

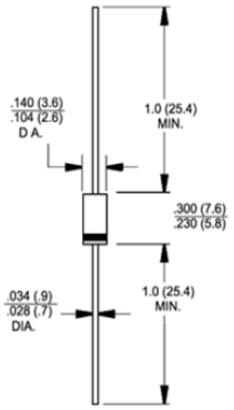
Schottky Barrier Rectifiers

Reverse Voltage 70V to 100V Forward Current 1.0A Amperes

Features

- Metal-Semiconductor junction with guardring
- 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

DO-204AC (DO-15)



Dimensions in inches and (millimeters)

Mechanical Data

- Case: JEDEC DO-204AC(DO-15) molded plastic
- Polarity: Color band denotes cathode end
- Weight: 0.014 ounce, 0.39 gram
- Mounting position: Any

MAXIMUM RATINGS and ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60HZ, resistive or inductive load.
For capactive load, derate current by 20%

PARAMETER		SYMBOL	SB270	SB280	SB290	SB2B0	UNIT
Maximum repetitive peak reverse voltage		VRRM	70	80	90	100	V
Maximum RMS voltage		VRMS	49	56	63	70	V
Maximum DC blocking voltage		VDC	70	80	90	100	V
Maximum average forward rectified current @ T_L=100℃		IF(AV)	2.0				A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load		IFSM	60				A
Maximum forward voltage at 2A DC T_A=25℃ T_A=100℃		VF	0.79 0.69				V
Maximum DC reverse current at rated DC blocking voltage (1)	T_J=25℃	IR	0.05				mA
	T_J=125℃		1				
Typical junction capacitance (Note 1)		C_j	50				pF
Typical thermal resistance(Note 2)		$R_{\theta JA}$	85				℃/W
		$R_{\theta JC}$	45				
		$R_{\theta JL}$	40				
Operating junction 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 at .375(9.5mm) Lead Length, PC Board Mounted

RATINGS AND CHARACTERISTICS CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

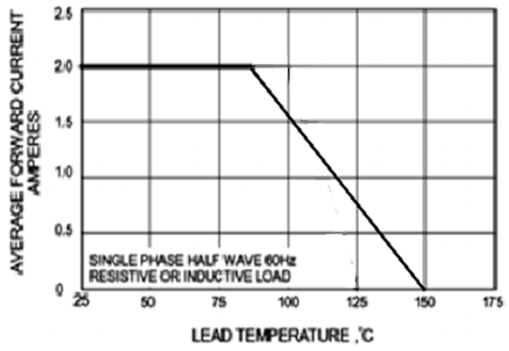


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

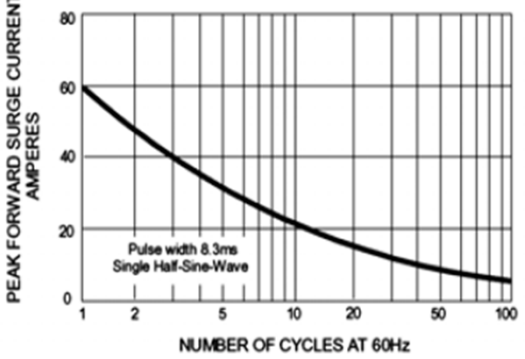


FIG.3 - TYPICAL JUNCTION CAPACITANCE

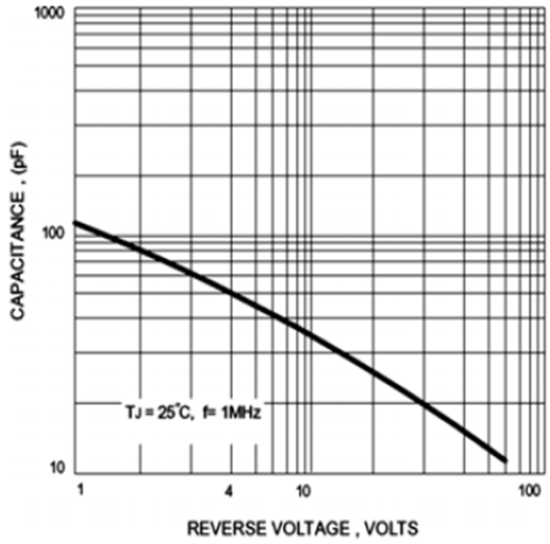


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

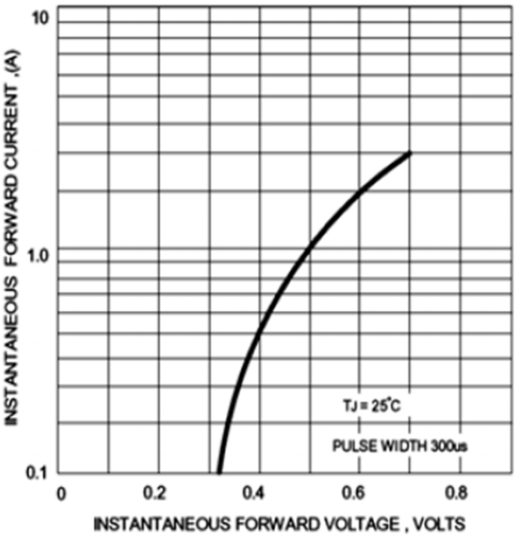


FIG.5 - TYPICAL REVERSE CHARACTERISTICS