

SB220 thru SB2100

1.Feature & Dimensions

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Low power loss,high efficiency
- * For use in low voltage high frequency inverters, free wheeling,and polarity protection applications
- * Guarding for over voltage protection
- * High temperature soldering guaranteed:
260°C/10 seconds at terminals

2.Mechanical Data

Case: JEDEC DO-15, molded plastic over sky die

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.015 oz., 0.40 g

Handling precautin:None

3.Electrical Characteristic

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SB220	SB230	SB240	SB250	SB260	SB280	SB290	SB2100	Unit
Maximum repetitive peak reverse voltage	VRRM	20	30	40	50	60	80	90	100	V
Maximum RMS voltage	VRMS	14	21	28	35	42	56	63	70	V
Maximum DC blocking voltage	VDC	20	30	40	50	60	80	90	100	V
Maximum average forward rectified current 0.375" (9.5mm) lead length (See fig. 1)	IF(AV)	2.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	60								A
Typical thermal resistance (Note 1)	RθJA	50								°C/W
Operating junction and storage temperature range	TJ, TSTG	-40 to +125								°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SB220	SB230	SB240	SB250	SB260	SB280	SB290	SB2100	Unit	
Maximum instantaneous forward voltage at 2.0A	V _F	0.50			0.70		0.84			V	
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TA = 100°C	IR	0.5					20				mA
Typical junction capacitance at 4.0V, 1MHz	CJ	170									PF

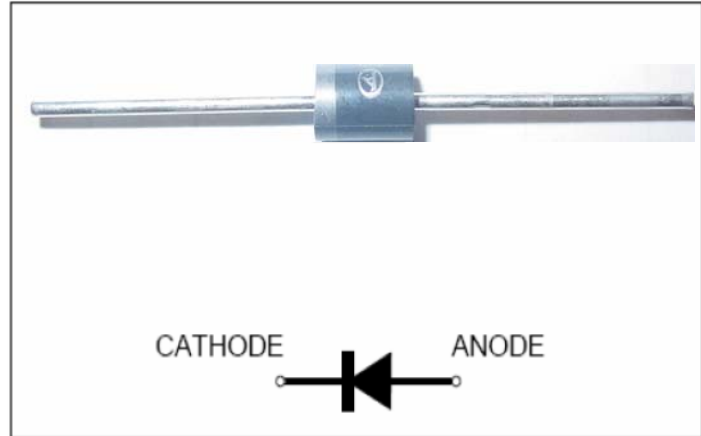
NOTES:

1. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

Schottky Barrier Rectifiers

Reverse Voltage 20 to 100V

Forward Current 2.0A



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4. Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

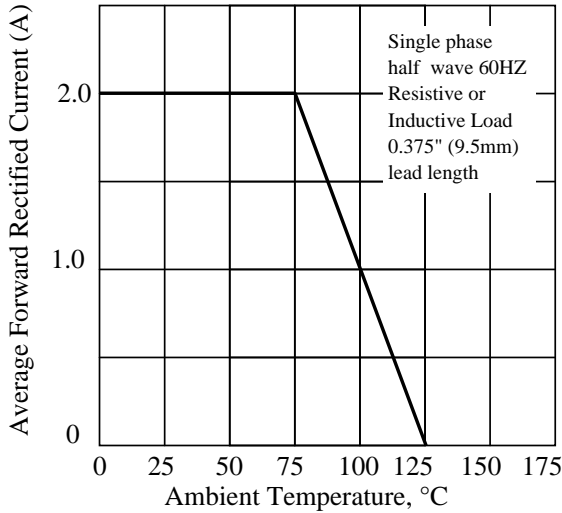


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

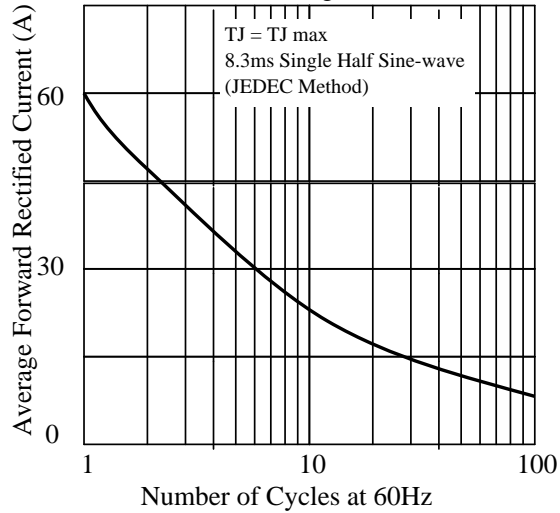


Fig 3. - Typical Instantaneous Forward Characteristics

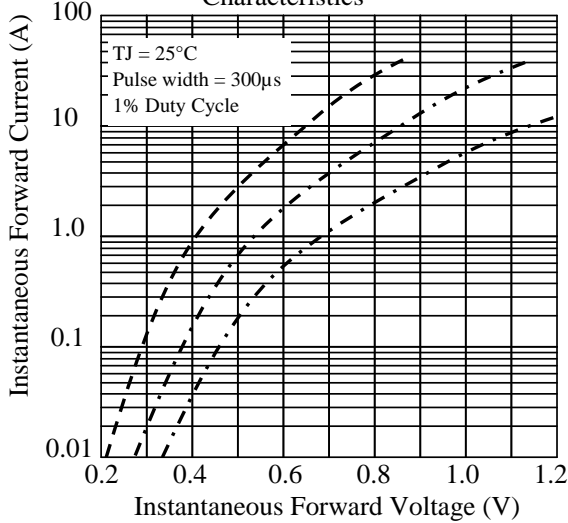


Fig 4. - Typical Reverse Characteristics

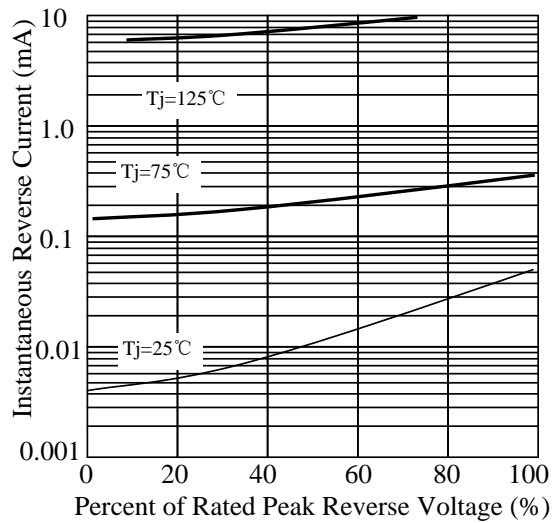


Fig 5. - typical transient thermal impedance

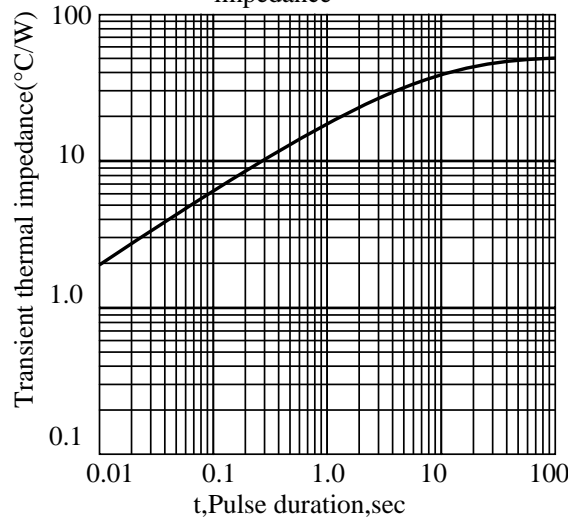
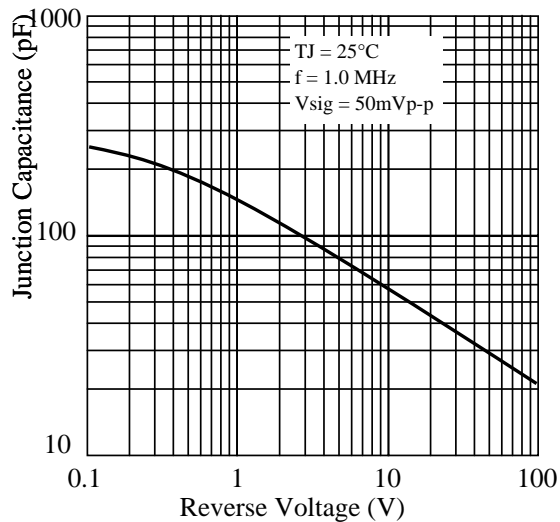


Fig 6. - Typical Junction Capacitance



5.Package Dimensions in inches and (millimeters)
