



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 70 - 100 Volts CURRENT 1.0 Ampere

**SB070PT
THRU
SB0B0PT**

FEATURES

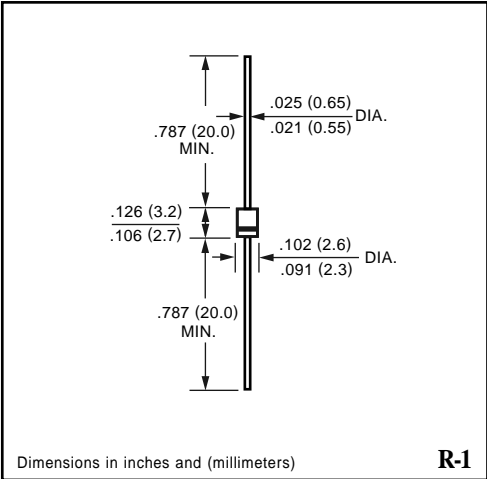
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Low switching noise
- * Low forward voltage drop
- * High current capability
- * High switching capability
- * High reliability
- * High surge capability
- * High temperature soldering guaranteed : 260°C/10 seconds , 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC R-1 molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.19 gram



R-1



Dimensions in inches and (millimeters)

R-1

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	SB070PT	SB080PT	SB090PT	SB0B0PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	70	80	90	100	Volts
Maximum RMS Voltage	VRMS	49	56	63	70	Volts
Maximum DC Blocking Voltage	VDC	70	80	90	100	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length (SEE FIG.1)	Io	1.0				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30				Amps
Typical Junction Capacitance (Note 1)	CJ	110				pF
Typical Thermal Resistance (Note 2)	R θJA	80				°C / W
Operating Temperature Range	TJ	-65 to +150				°C
Storage Temperature Range	TSTG	-65 to +150				°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	SB070PT	SB080PT	SB090PT	SB0B0PT	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC	VF	0.70		0.85		Volts
Maximum Average Reverse Current	IR	1.0				mAmps
at Rated DC Blocking Voltage		10				mAmps

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
 2. Thermal Resistance (Junction to Ambient) : Vertical PC Board Mounting, 0.5" (12.7mm) Lead Length.

RATING CHARACTERISTIC CURVES (SB070PT THRU SB0B0PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

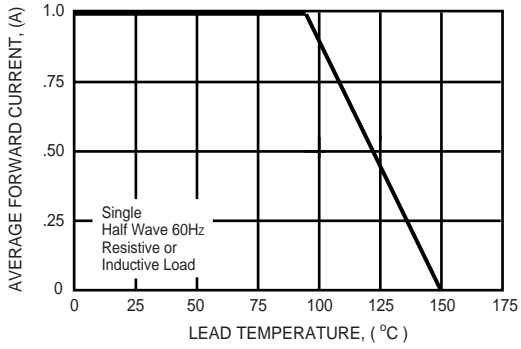


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

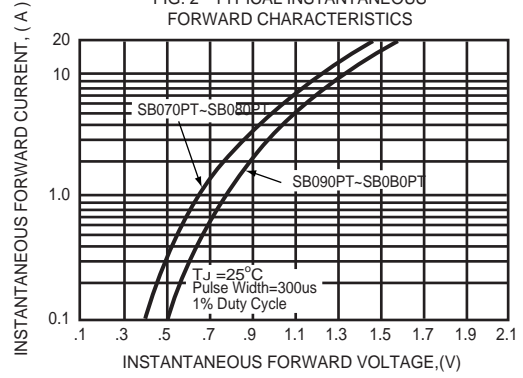


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

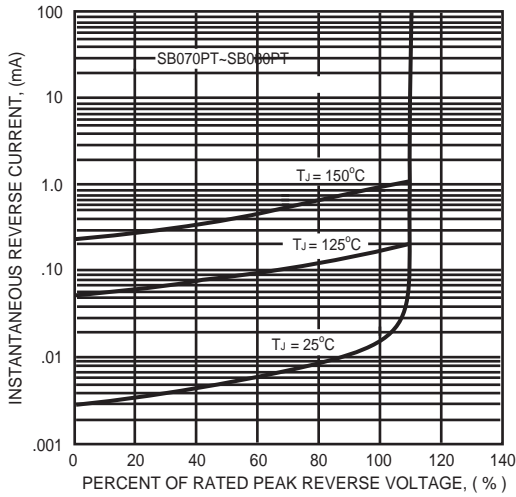


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

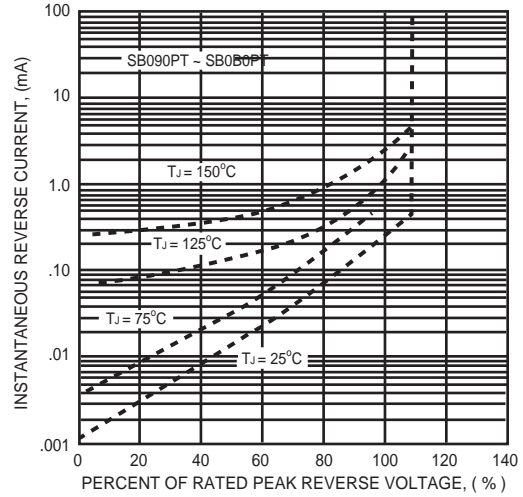


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

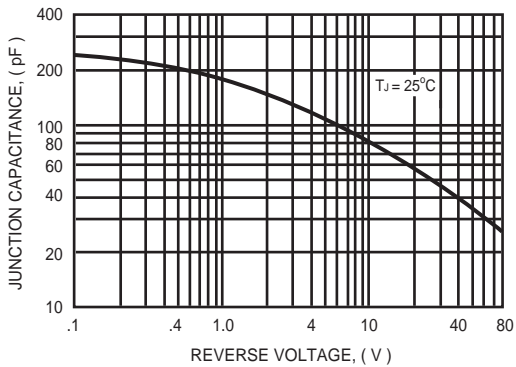


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

