



CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 - 60 Volts CURRENT 2.0 Amperes

SBM22PT

THRU

SBM26PT

Lead free devices

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * For surface mounted applications
- * Low profile package
- * Built-in strain relief
- * Metal silicon junction, majority carrier conduction
- * Low power loss, high efficiency
- * High current capability, low forward voltage drop
- * High surge capability
- * For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- * High temperature soldering guaranteed : 260°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC SMB molded plastic

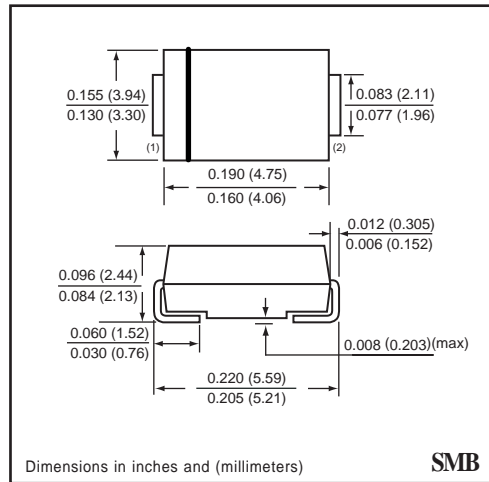
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Weight: 0.003 ounce 0.093 gram



SMB



SMB

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	SBM22PT	SBM23PT	SBM24PT	SBM25PT	SBM26PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	Volts
Maximum RMS Voltage	VRMS	14	21	28	35	42	Volts
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current	Io	2.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	50					Amps
Typical Junction Capacitance (Note 2)	CJ	210			110		pF
Typical Thermal Resistance (Note 1)	RθJL	17					°C / W
Operating Temperature Range	TJ	-65 to +125			-65 to +150		°C
Storage Temperature Range	TSTG	-65 to +150					°C

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

CHARACTERISTICS	SYMBOL	SBM22PT	SBM23PT	SBM24PT	SBM25PT	SBM26PT	UNITS
Maximum Instantaneous Forward Voltage at 2.0 A DC	VF	0.55			0.70		Volts
Maximum Average Reverse Current	IR	0.5					mAmps
at Rated DC Blocking Voltage							10

NOTES : 1. Thermal Resistance (Junction to Lead) : PC Board Mounted on 0.2 X 0.2" (5 X 5mm) copper pad area.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts.

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RATING CHARACTERISTIC CURVES (SBM22PT THRU SBM26PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

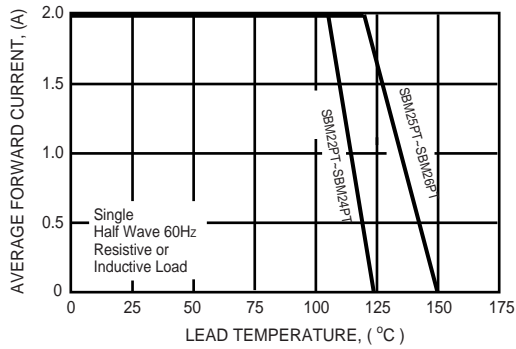


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

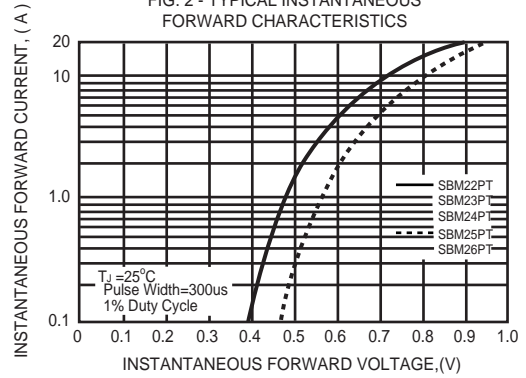


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

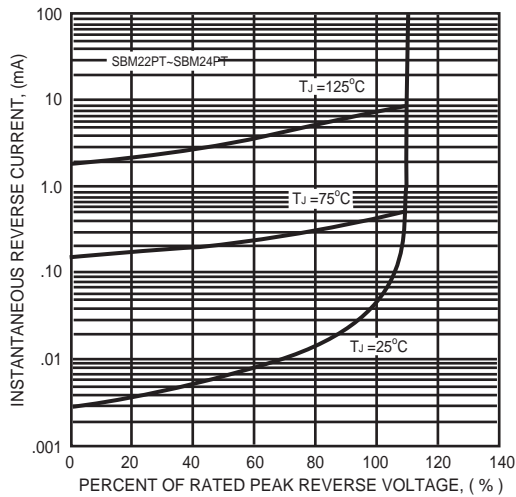


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

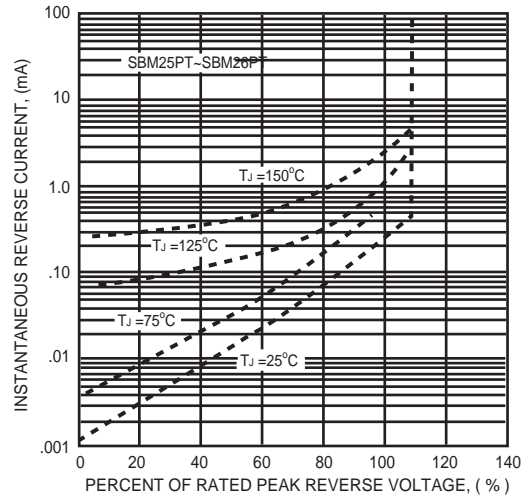


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

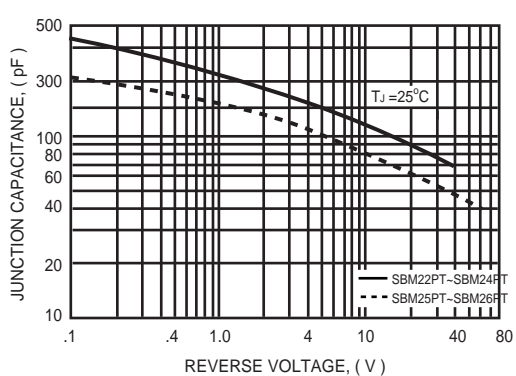


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

