



CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 70 - 100 Volts CURRENT 2.0 Amperes

SBM27PT

THRU

SBM210PT

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

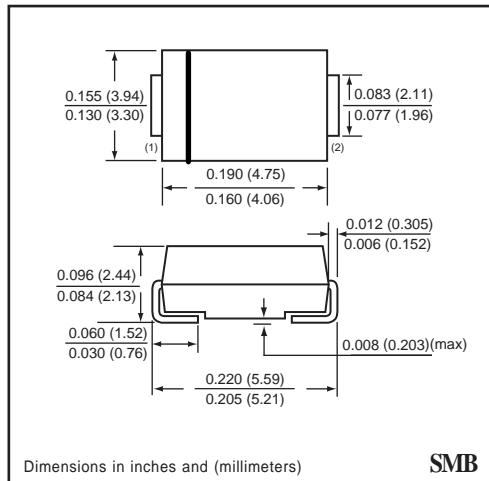
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Weight: 0.003 ounce 0.093 gram



SMB



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	SBM27PT	SBM28PT	SBM29PT	SBM210PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	70	80	90	100	Volts
Maximum RMS Voltage	V _{RMS}	49	56	63	70	Volts
Maximum DC Blocking Voltage	V _{DC}	70	80	90	100	Volts
Maximum Average Forward Rectified Current	I _O	2.0				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	50				Amps
Typical Junction Capacitance (Note 2)	C _J	110				pF
Typical Thermal Resistance (Note 1)	R _{θJL}	17				°C / W
Operating and Storage Temperature Range	T _J ,T _{STG}	-65 to +150				°C

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

CHARACTERISTICS	SYMBOL	SBM27PT	SBM28PT	SBM29PT	SBM210PT	UNITS
Maximum Instantaneous Forward Voltage at 2.0 A DC	V _F	0.75		0.80		Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C	0.5				mAmps
	@ TA = 100°C	10				mAmps

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.

RATING CHARACTERISTIC CURVES (SBM27PT THRU SBM210PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

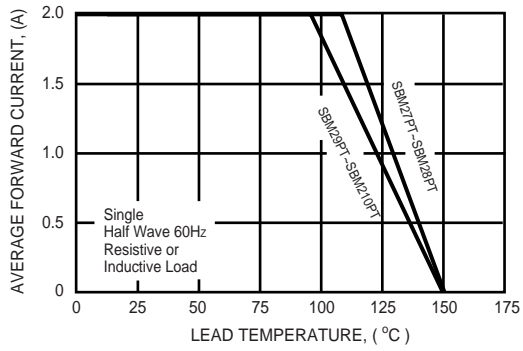


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

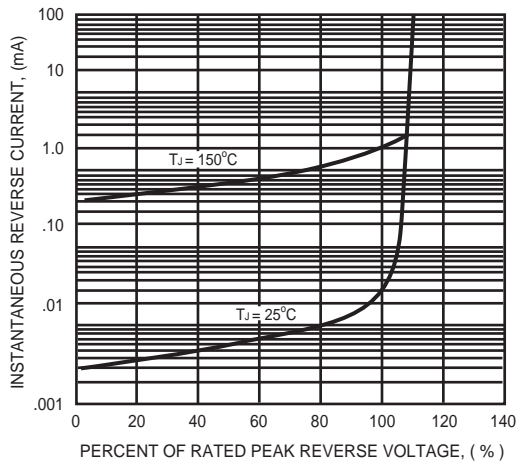


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

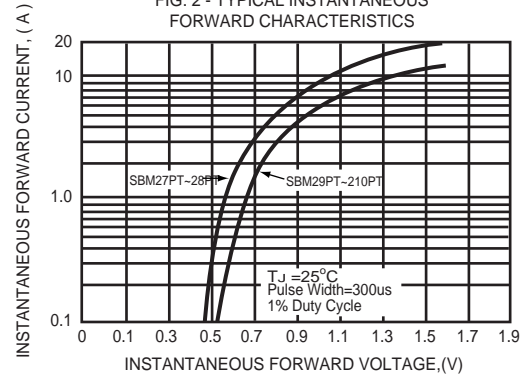


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

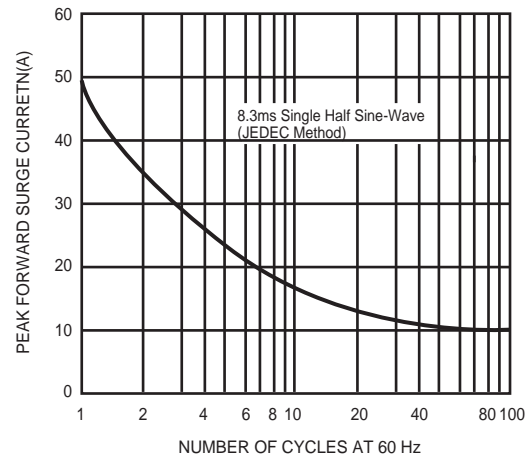


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

