



CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 - 60 Volts CURRENT 3.0 Amperes

Lead free devices

SBM32PT

THRU

SBM36PT

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

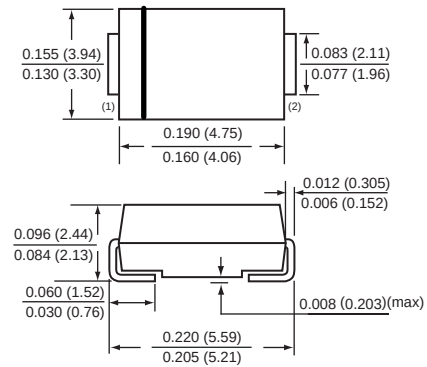
Weight: 0.003 ounce 0.093 gram

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%.



SMB



SMB

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

RATINGS	SYMBOL	SBM32PT	SBM33PT	SBM34PT	SBM35PT	SBM36PT	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	3.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	80					Amps
Typical Junction Capacitance (Note 2)	CJ	250					pF
Typical Thermal Resistance (Note 1)	R θ JL	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	SBM32PT	SBM33PT	SBM34PT	SBM35PT	SBM36PT	UNITS
Maximum Instantaneous Forward Voltage at 3.0 A DC		V _F	0.55			0.75		Volts
Maximum Average Reverse Current	@ T _A = 25°C	I _R	0.5					mAmps
at Rated DC Blocking Voltage	@ T _A = 100°C		30					mAmps

NOTES : 1. Thermal Resistance (Junction to Lead) : PC Board Mounted on 0.31 X 0.31" (8 X 8mm) copper pad area.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts.

2002-5

RATING CHARACTERISTIC CURVES (SBM32PT THRU SBM36PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

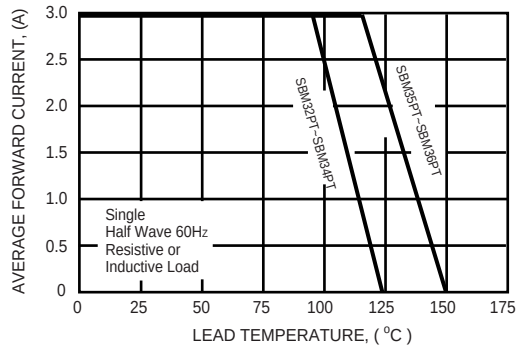


FIG. 2 - INSTANTANEOUS FORWARD CURRENT, (A)

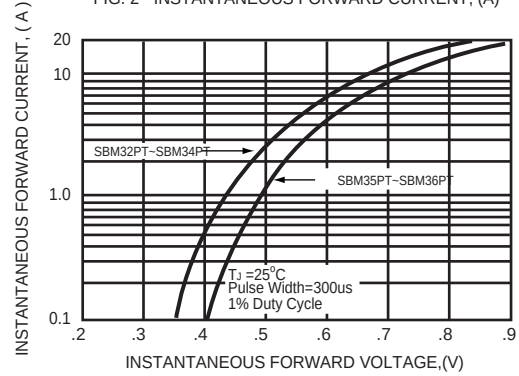


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

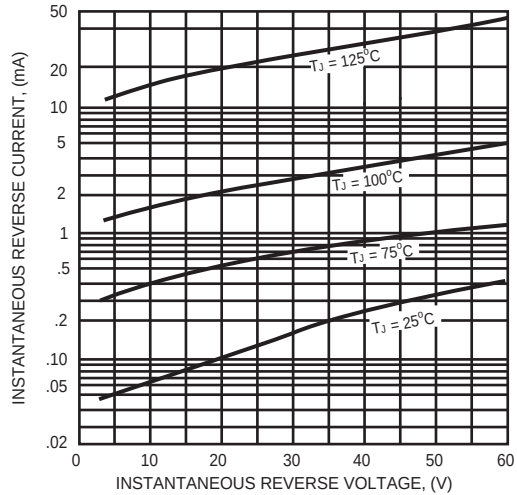


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

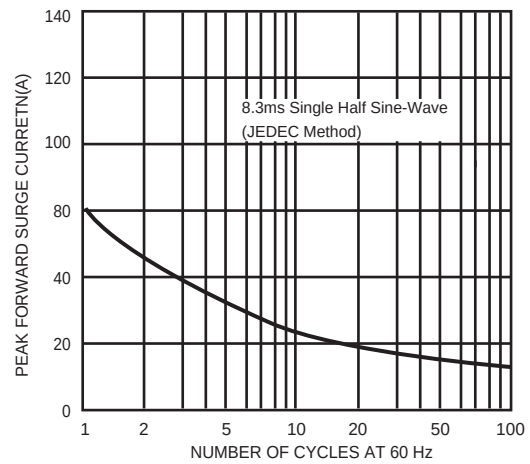


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

