



# CHENMKO ENTERPRISE CO.,LTD

**SCM54LHPT**

## SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 40 Volts CURRENT 5.0 Amperes

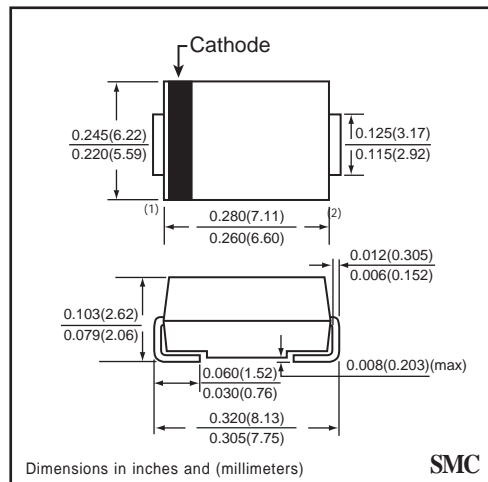
Lead free devices

### 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 SMC molded plastic  
**Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Weight:** 0.007 ounce 0.25 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%.

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

RATINGS	SYMBOL	SCM54LHPT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	40	Volts
Maximum RMS Voltage	VRMS	28	Volts
Maximum DC Blocking Voltage	VDC	40	Volts
Maximum Average Forward Rectified Current	Io	5.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	150	Amps
Typical Junction Capacitance (Note 2)	CJ	300	pF
Typical Thermal Resistance (Note 1)	R θJL	10	°C / W
Operating and Storage Temperature Range	TJ, TSTG	-65 to +125	°C

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

CHARACTERISTICS	SYMBOL	SCM54LHPT	UNITS
Maximum Instantaneous Forward Voltage at 5.0 A DC	Vf	0.45	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C	0.5	mAmps
	@ TA = 100°C	20	mAmps

NOTES : 1. Thermal Resistance ( Junction to Lead ) : PC Board Mounted on 0.55 X 0.55" ( 14 X 14mm ) copper pad area.  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts.

# RATING CHARACTERISTIC CURVES ( SCM54LHPT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

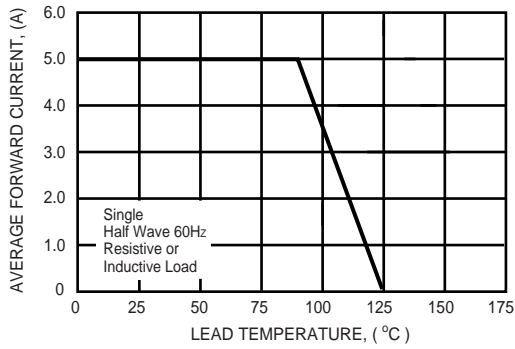


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

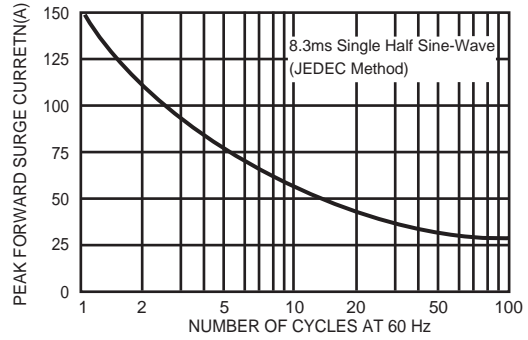


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

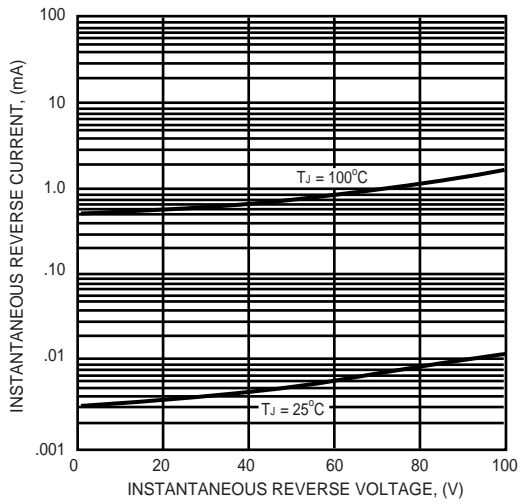


FIG. 4 - INSTANTANEOUS FORWARD CURRENT, (A)

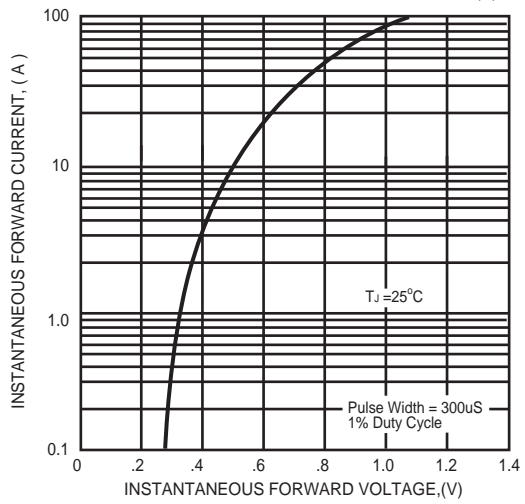


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

