



**CHENMKO ENTERPRISE CO.,LTD**

*Halogens free devices*

**SURFACE MOUNT**

**SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE RANGE 20 - 60 Volts CURRENT 5.0 Amperes**

**SCM52GP**

**THRU**

**SCM56GP**

**FEATURES**

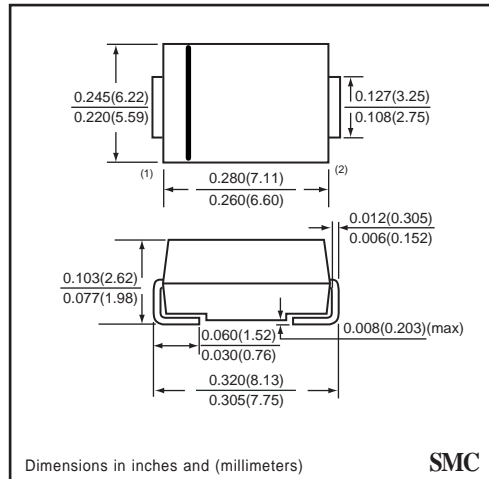
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* For surface mounted applications
- \* Low profile package
- \* Built-in strain relief
- \* Metal silicon junction, majority carrier conduction
- \* Low power loss, high efficiency
- \* High current capability, low 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	SCM52GP	SCM53GP	SCM54GP	SCM55GP	SCM56GP	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	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			-65 to +150		°C

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

CHARACTERISTICS	SYMBOL	SCM52GP	SCM53GP	SCM54GP	SCM55GP	SCM56GP	UNITS
Maximum Instantaneous Forward Voltage at 5.0 A DC	VF	0.55			0.70		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 ( SCM52GP THRU SCM56GP )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

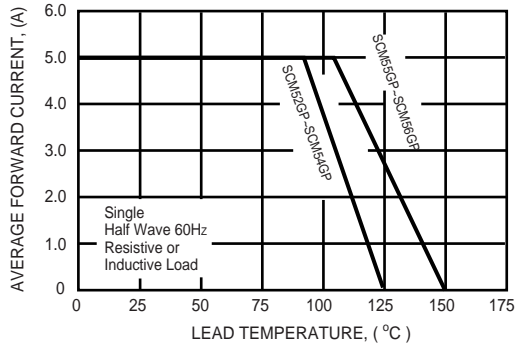


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

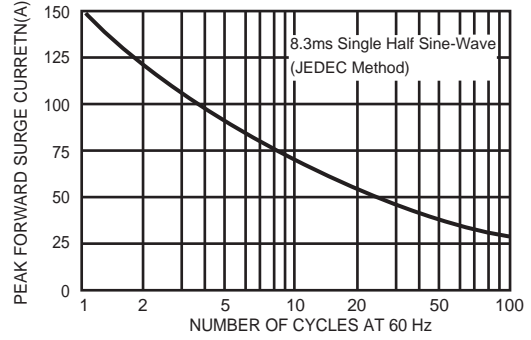


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

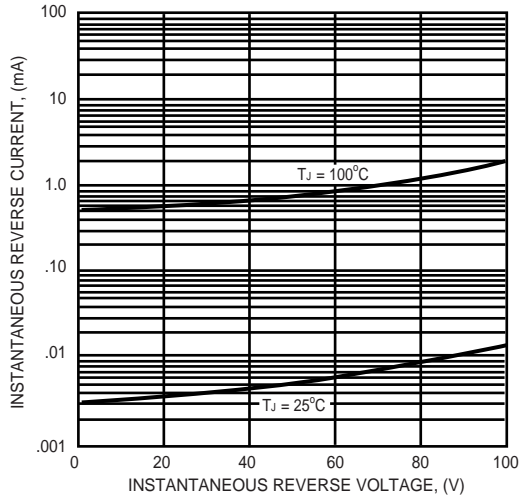


FIG. 4 - INSTANTANEOUS FORWARD CURRENT, (A)

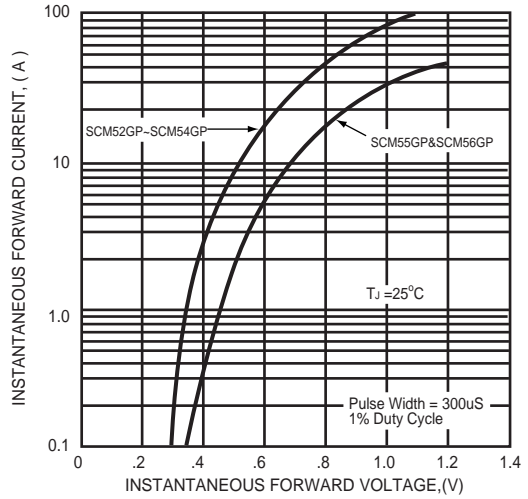


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

