



# CHENMKO ENTERPRISE CO.,LTD

Lead free devices

## SURFACE MOUNT

### SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 100 Volts CURRENT 3.0 Amperes



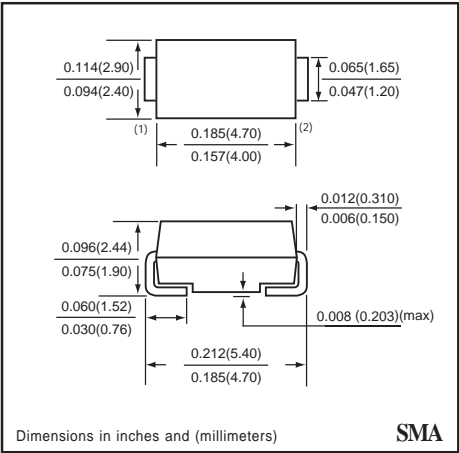
**FEATURES**

- \* 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
- \* Lead free devices

**MECHANICAL DATA**

**Case:** JEDEC SMA molded plastic

**Polarity:** Color band denotes cathode end



**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	SSM310PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	100	Volts
Maximum RMS Voltage	VRMS	70	Volts
Maximum DC Blocking Voltage	VDC	100	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) (SEE FIG.4)	CJ	250	pF
Typical Thermal Resistance (Note 1)	R θ JL	30	°C / W
Operating Temperature Range	TJ	-65 to +150	°C
Storage Temperature Range	TSTG	-65 to +150	°C

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

CHARACTERISTICS	SYMBOL	SSM310PT	UNITS
Maximum Instantaneous Forward Voltage at 3.0 A DC	VF	0.85	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C	0.5	mAmps
	@ TA = 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.

## RATING CHARACTERISTIC CURVES ( SSM310PT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

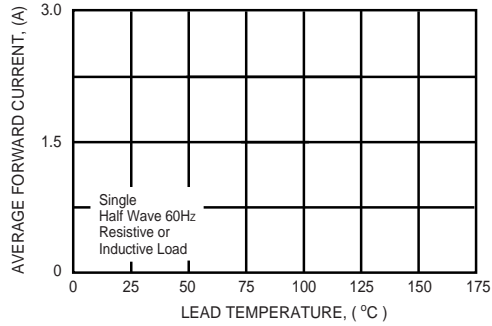


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

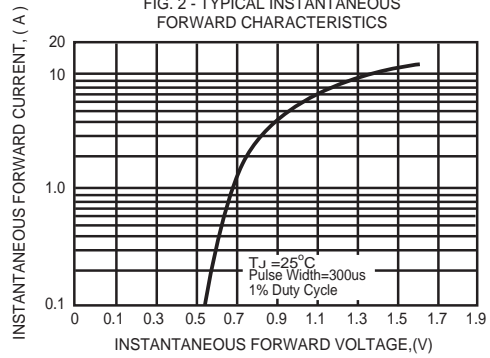


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

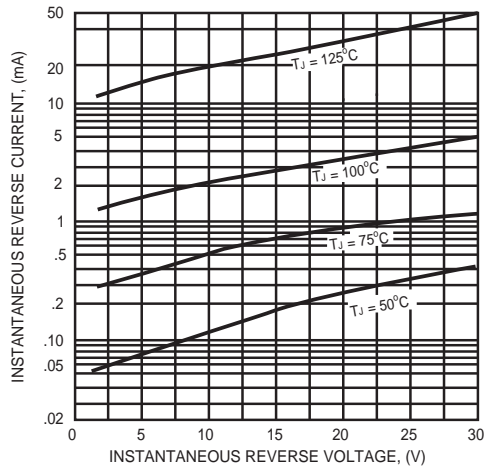


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

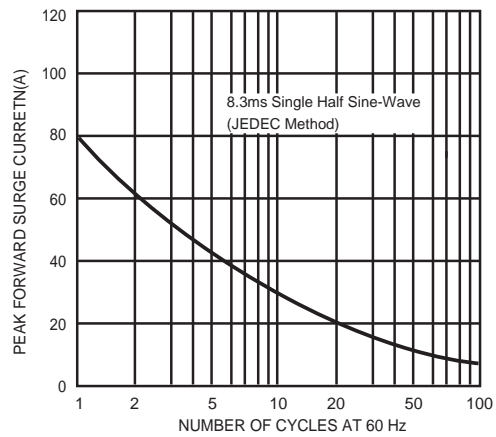


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

