

CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 - 40 Volts CURRENT 2.0 Amperes

SSM22LPT THRU SSM24LPT

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 SMA molded plastic

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

Method 2026

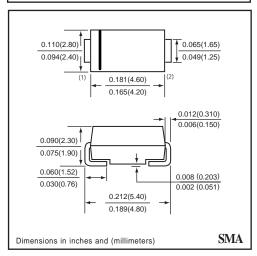
Polarity: Color band denotes cathode end **Weight:** 0.002 ounce 0.064 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at $25^{\circ}\mathrm{C}$ ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.





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

RATINGS	SYMBOL	SSM22LPT	SSM23LPT	SSM24LPT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	Volts
Maximum RMS Voltage	VRMS	14	21	28	Volts
Maximum DC Blocking Voltage	VDC	20	30	40	Volts
Maximum Average Forward Rectified Current	lo	2.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	60			Amps
Typical Junction Capacitance (Note 2)	C1	250			
Typical Thermal Resistance (Note 1)	RθJL	20			
Operating and Storage Temperature Range	TJ,TSTG	-65 to +125			°C

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

CHARACTERISTICS		SYMBOL	SSM22LPT	SSM23LPT	SSM24LPT	UNITS				
Maximum Instantaneous Forward Voltage at 2.0 A DC		VF	0.40			Volts				
Maximum Average Reverse Current	@ Ta = 25°C	lo.	1.0			mAmps				
at Rated DC Blocking Voltage	@ Ta = 100°C	lR	10			mAmps				

NOTES: 1. Thermal Resistance (Junction to Lead): PC Board Mounted on 0.2 X 0.2" (5 X 5mm) copper pad area.

Measured at 1.0 MHz and applied reverse voltage of 4.0 volts.

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RATING CHARACTERISTIC CURVES (SSM22LPT THRU SSM24LPT) FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE INSTANTANEOUS FORWARD CURRENT, (A) 1.0 Single Half Wave 60Hz Resistive or Inductive Load 1% Duty Cycle 0 0.1 0 25 75 100 125 150 175 0 .4 .5 .6 LEAD TEMPERATURE, (°C) INSTANTANEOUS FORWARD VOLTAGE,(V) FIG. 3 - TYPICAL REVERSE CHARACTERISTICS FIG. 4 - MAXIMUM NON-REPETIVE FORWARD SURGE CURRENT 100 75 INSTANTANEOUS REVERSE CURRENT, (mA) PEAK FORWARD SURGE CURRETN(A) 10 60 8.3ms Single Half Sine-Wave (JEDEC Method) 1.0 45 .10 30 15 .01 0 .001 2 20 80 100 6 8 10 40 40 60 140 1 PERCENT OF RATED PEAK REVERSE VOLTAGE, (%) NUMBER OF CYCLES AT 60 Hz FIG. 5 - TYPICAL JUNCTION CAPACITANCE JUNCTION CAPACITANCE, (pF) 1000

1.0

REVERSE VOLTAGE, (V)

40

100