

CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

EV¹⁰⁰⁵ SCHOTTKY BARRIER RECTIFIER VOLTAGE RANGE 20 - 40 Volts CURRENT 3.0 Amperes SSM32LPT THRU SSM34LPT

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

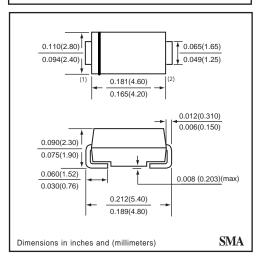
Polarity: Color band denotes cathode end **Weight:** 0.002 ounce 0.064 gram

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%.

SMA



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

| RATINGS | SYMBOL | SSM32LPT | SSM33LPT | SSM34LPT | 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 | 3.0 | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM | 100 | | | Amps |
| Typical Junction Capacitance (Note 2) | Cı | 250 | | | pF |
| Typical Thermal Resistance (Note 1) | RθJL | 18 | | | °C/W |
| Operating and Storage Temperature Range | TJ,TSTG | -65 to +125 | | | °C |

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

| / | | | | | | | | | | |
|---|--------------|--------|----------|----------|----------|-------|--|--|--|--|
| CHARACTERISTICS | | SYMBOL | SSM32LPT | SSM33LPT | SSM34LPT | UNITS | | | | |
| Maximum Instantaneous Forward Voltage at 3.0 A DC | | VF | 0.4 | | | Volts | | | | |
| Maximum Average Reverse Current | @ TA = 25°C | le le | 1.0 | | | mAmps | | | | |
| at Rated DC Blocking Voltage | @ Ta = 100°C | lR IR | | 40 | mAmps | | | | | |

NOTES: 1. Thermal Resistance (Junction to Lead): PC Board Mounted on 0.31 X 0.31" (8 X 8mm) copper pad area.

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

2002-2

RATING CHARACTERISTIC CURVES (SSM32LPT THRU SSM34LPT)

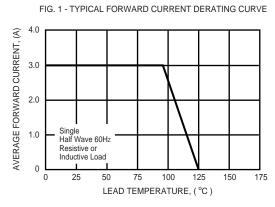


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

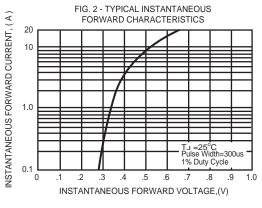
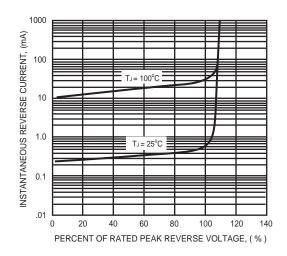


FIG. 4 - MAXIMUM NON-REPETIVE FORWARD



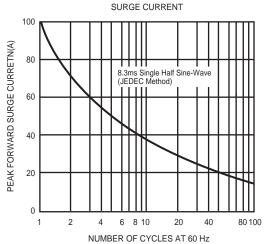


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

