



CHENMKO ENTERPRISE CO.,LTD

SSM5817SLPT

THRU

SSM5819SLPT

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 - 40 Volts CURRENT 0.5 Ampere

Lead free devices

FEATURES

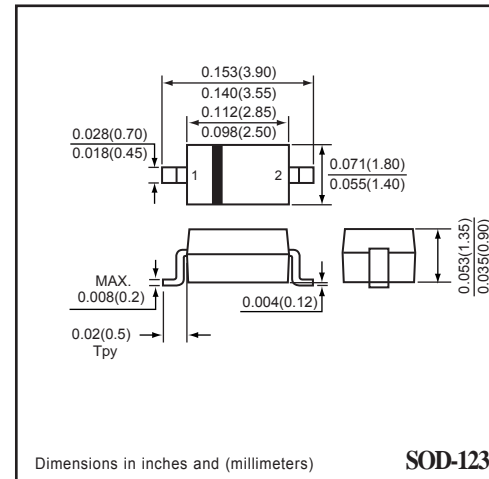
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * For surface mounted applications
- * Low profile package
- * Built-in strain relief
- * Metal silicon junction, majority carrier conduction
- * Low power loss, high efficiency
- * High current capability, low forward voltage drop
- * Power dissipation: 410mW
- * 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 SOD-123 molded plastic
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Weight: 0.001 ounce 0.032 gram



SOD-123



Dimensions in inches and (millimeters)

SOD-123

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	SSM5817SLPT	SSM5818SLPT	SSM5819SLPT	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 at TL = 100°C	Io	0.5			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	5.5			Amps
Typic Junction Capacitance (Note 2)	CJ	170			pF
Typical Thermal Resistance (Note 1)	R # JL	240			°C / W
Storage and Operating Temperature Range	TJ, TSTG	-65 to +125			°C
Voltage Rate of Change (Note 3)	di/dt	1000			V/uSec

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

CHARACTERISTICS	SYMBOL	SSM5817SLPT	SSM5818SLPT	SSM5819SLPT	UNITS
Maximum Instantaneous Forward Voltage at IF=0.5A	@ TA = 25°C	0.385	0.430	0.510	Volts
	@ TA = 100°C	0.330	0.380	0.460	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C	250	130	20	uAmps
	@ TA = 100°C	13	11	8	mAmps

NOTES : 1. Thermal Resistance (Junction to Lead) : PC Board Mounted on 0.06 X 0.06" (0.15X 0.15mm) copper pad area.
 2. Measured at 1.0 MHz and applied reverse voltage of 0 volt.
 3. di/dt measured at rated reverse voltage.

RATING CHARACTERISTIC CURVES (SSM5817SLPT THRU SSM5819SLPT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

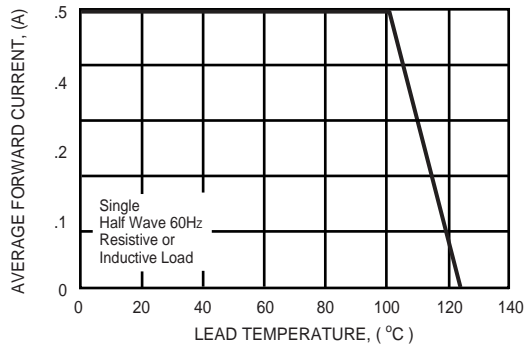


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

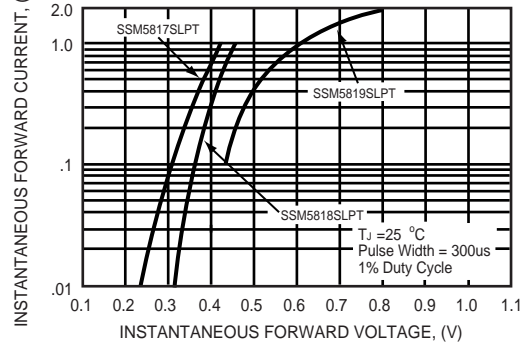


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

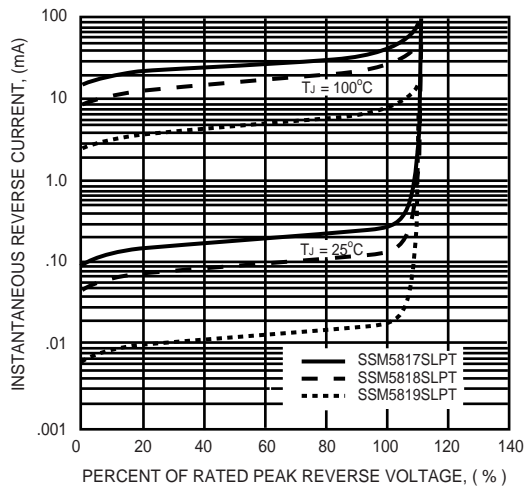


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

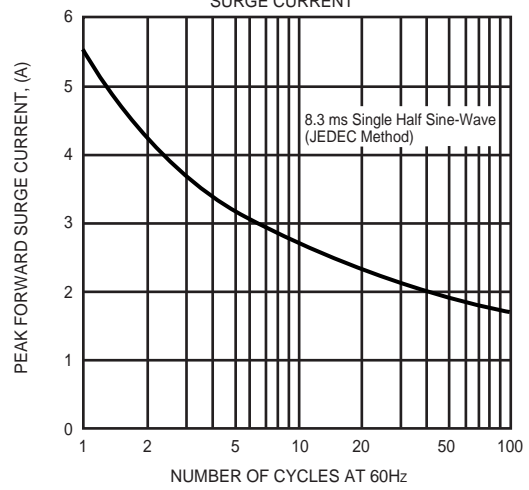


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

