



**CHENMKO ENTERPRISE CO.,LTD**

**SURFACE MOUNT**

**SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE RANGE 60 Volts CURRENT 1.0 Ampere**

**SSM0160SPT**

*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
- \* 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 SOD-123 molded plastic

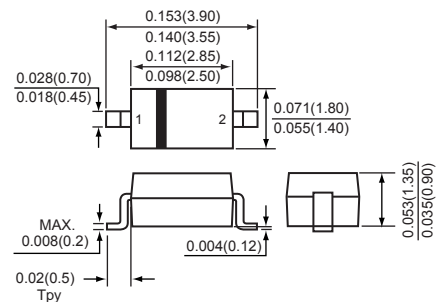
**Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Weight:** 0.001 ounce 0.032 gram



**SOD-123**



Dimensions in inches and (millimeters)

**SOD-123**

#### MAXIMUM RATINGS ( At $T_A = 25^{\circ}\text{C}$ unless otherwise noted )

RATINGS	SYMBOL	SSM0160SPT	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	60	Volts
Maximum RMS Voltage	$V_{RMS}$	42	Volts
Maximum DC Blocking Voltage	$V_{DC}$	60	Volts
Maximum Average Forward Rectified Current at $T_L = 90^{\circ}\text{C}$	$I_o$	1.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) $T_L = 70^{\circ}\text{C}$	$I_{FSM}$	25	Amps
Typical Junction Capacitance (Note 2)	$C_J$	110	pF
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	80	$^{\circ}\text{C} / \text{W}$
Storage and Operating Temperature Range	$T_J, T_{STG}$	-65 to +125	$^{\circ}\text{C}$

#### ELECTRICAL CHARACTERISTICS ( At $T_A = 25^{\circ}\text{C}$ unless otherwise noted )

CHARACTERISTICS	SYMBOL	SSM0160SPT	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC	$V_F$	0.55	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	$I_R$	50	uAmps

NOTES : 1. Thermal Resistance ( Junction to Lead ) : PC Board Mounted on 0.2 X 0.2" ( 5 X 5mm ) copper pad area.  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts

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## RATING CHARACTERISTIC CURVES ( SSM0160SPT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

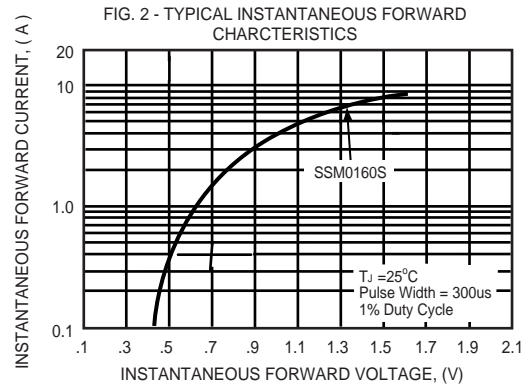
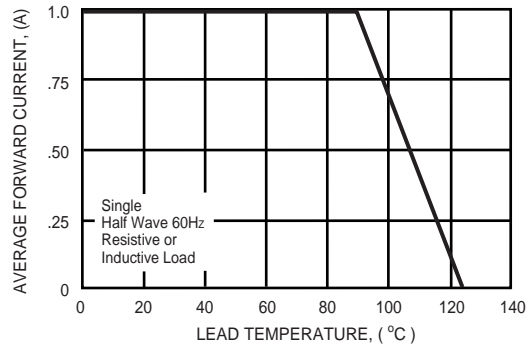


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

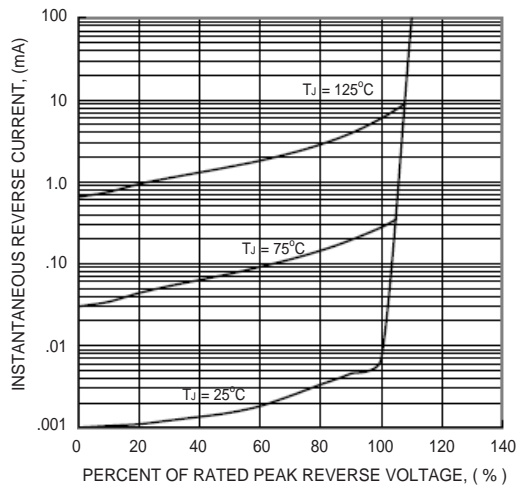


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

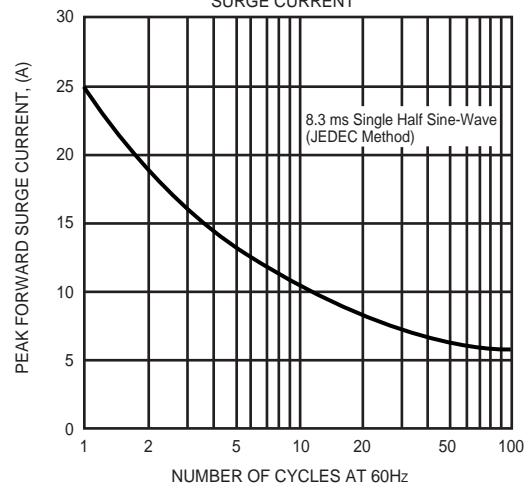


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

