



CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 150 Volts CURRENT 0.5 Ampere

SSM05150SPT

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

MECHANICAL DATA

Case: JEDEC SOD-123 molded plastic

Polarity: Color band denotes cathode end

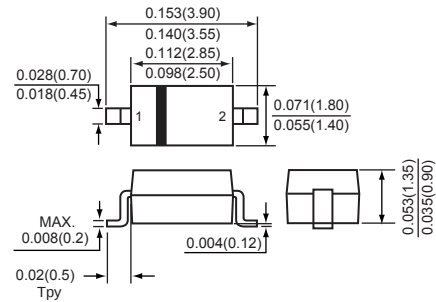
Weight: 0.001 ounce 0.032 gram

MARKING

*K18



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	SSM05150SPT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	150	Volts
Maximum RMS Voltage	VRMS	105	Volts
Maximum DC Blocking Voltage	VDC	150	Volts
Maximum Average Forward Rectified Current at TL = 90°C	IO	0.5	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) TL = 70°C	IFSM	30	Amps
Typical Junction Capacitance (Note 2)	CJ	15	pF
Typical Thermal Resistance (Note 1)	R θJL	80	°C / W
Storage and Operating Temperature Range	TJ, TSTG	-65 to +125	°C

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

CHARACTERISTICS	SYMBOL	SSM05150SPT	UNITS
Maximum Instantaneous Forward Voltage at 0.5 A DC	VF	0.80	Volts
Maximum Average Reverse Current	IR	50	uAmps
at Rated DC Blocking Voltage		5	mAmps

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

2006-1

RATING CHARACTERISTIC CURVES (SSM05150SPT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

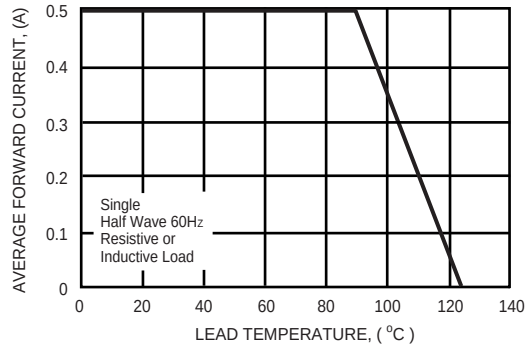


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

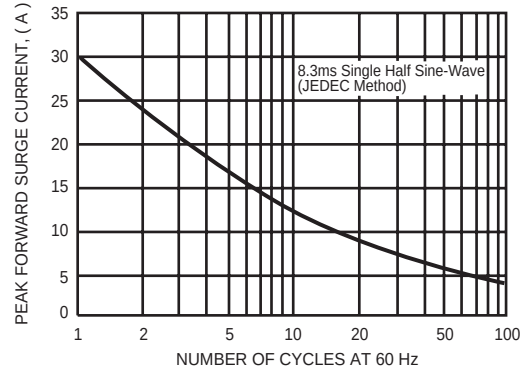


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

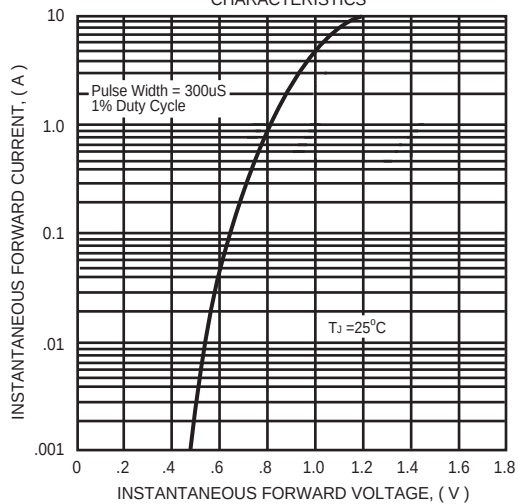


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

