



# CHENMKO ENTERPRISE CO.,LTD

**CHSBDJGP**

## SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 40 Volts CURRENT 2.0 Amperes

Halogens 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

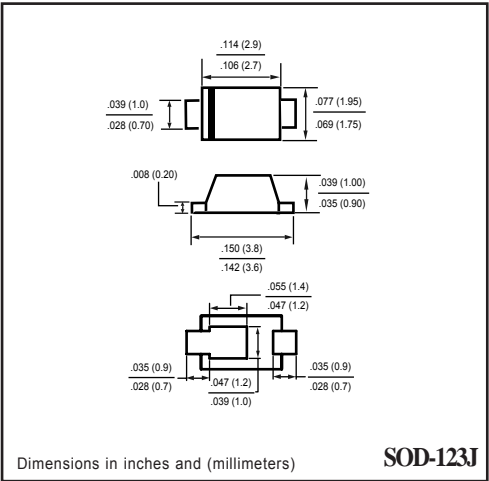
### MARKING

\* 24



SOD-123J

### CIRCUIT



SOD-123J

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

RATINGS	SYMBOL	CHSBDJGP	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	40	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	28	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	40	Volts
Maximum Average Forward Rectified Current	I <sub>O</sub>	2.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	40	Amps
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	200	pF
Typical Thermal Resistance	R <sub>θJL</sub>	65	°C / W
Operating Temperature Range	T <sub>J</sub>	-65 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150	°C

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

CHARACTERISTICS	SYMBOL	CHSBDJGP	UNITS
Maximum Instantaneous Forward Voltage at 2.0 A DC	V <sub>F</sub>	0.5	Volts
Maximum Average Reverse Current at V <sub>R</sub> = 40V	I <sub>R</sub>	500	uAmps

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts

2013-03

## RATING CHARACTERISTIC CURVES ( CHSBDJGP )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

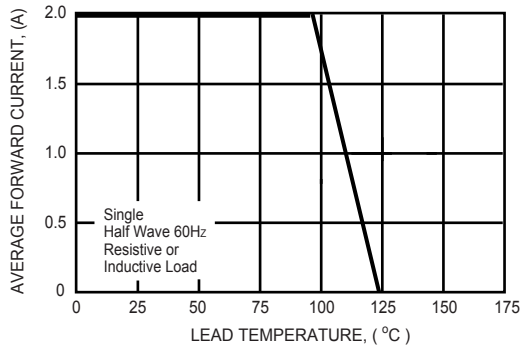


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

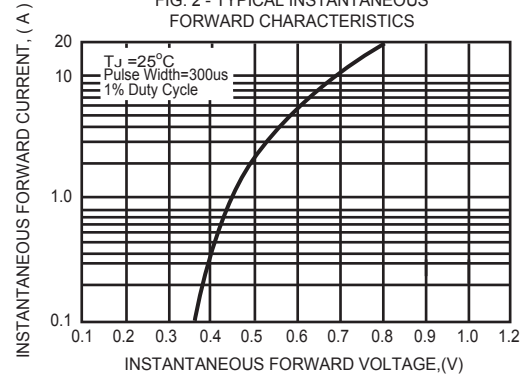


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

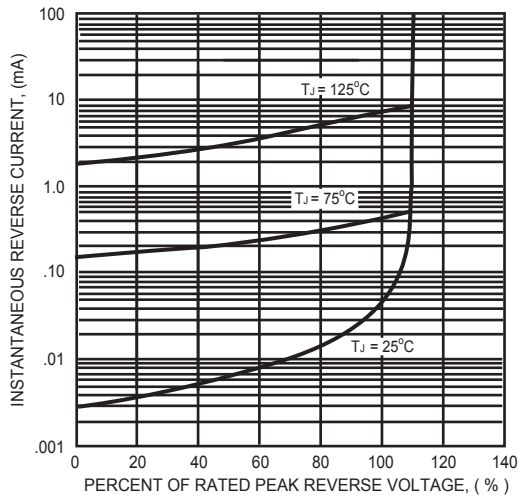


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

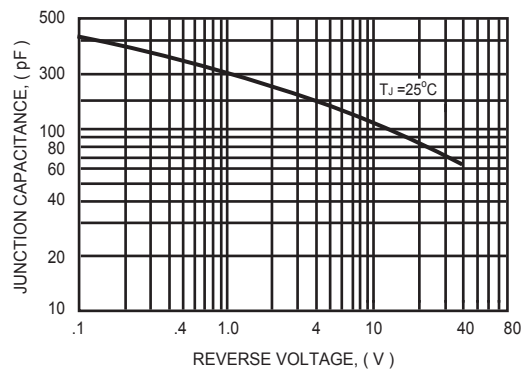


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

