



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 - 60 Volts CURRENT 3.0 Amperes

CHSDCB1GP

THRU

CHSDCF1GP

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
- * Lead free devices

MECHANICAL DATA

Case: JEDEC SMA molded plastic

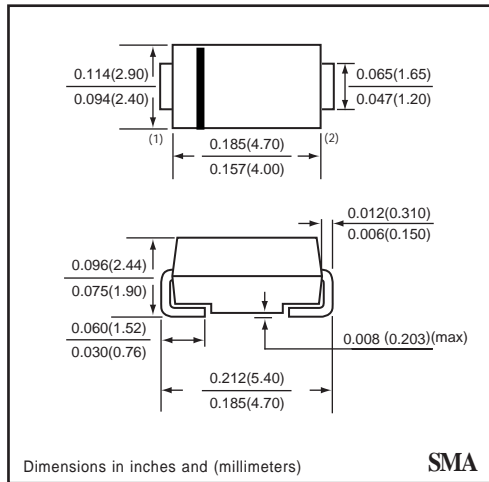
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Weight: 0.002 ounce 0.064 gram



SMA



Dimensions in inches and (millimeters)

SMA

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	CHSDCB1GP	CHSDCC1GP	CHSDCD1GP	CHSDCE1GP	CHSDCF1GP	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	Volts
Maximum RMS Voltage	VRMS	14	21	28	35	42	Volts
Maximum DC Blocking Voltage	Vdc	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current	Io	3.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	80					Amps
Typical Junction Capacitance (Note 2) (SEE FIG.4)	CJ	250					pF
Typical Thermal Resistance (Note 1)	RθJL	18					°C / W
Operating Temperature Range	TJ	-65 to +125			-65 to +150		°C
Storage Temperature Range	TSTG	-65 to +150					°C

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

CHARACTERISTICS	SYMBOL	CHSDCB1GP	CHSDCC1GP	CHSDCD1GP	CHSDCE1GP	CHSDCF1GP	UNITS
Maximum Instantaneous Forward Voltage at 3.0 A DC	VF	0.55			0.70		Volts
Maximum Average Reverse Current	IR	0.1					mAmps
at Rated DC Blocking Voltage		30					mAmps

NOTES : 1. Thermal Resistance (Junction to Lead) : PC Board Mounted on 0.31 X 0.31" (8 X 8mm) copper pad area.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts.

2013-01

RATING CHARACTERISTIC CURVES (CHSDCB1GP THRU CHSDCF1GP)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

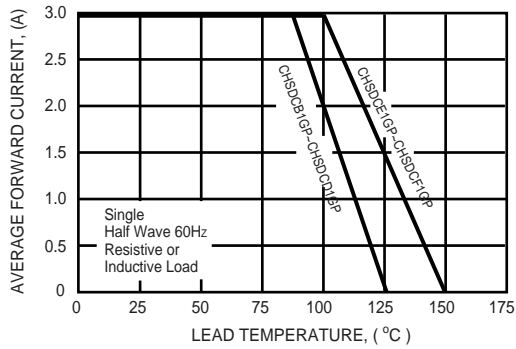


FIG. 2 - INSTANTANEOUS FORWARD CURRENT, (A)

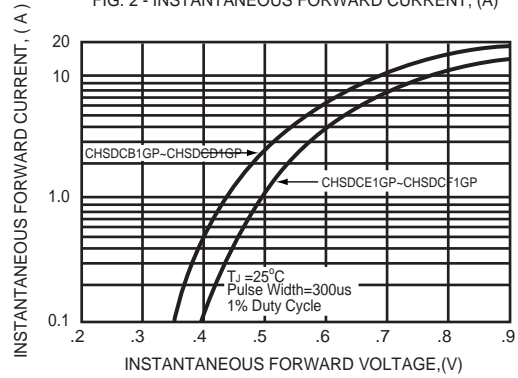


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

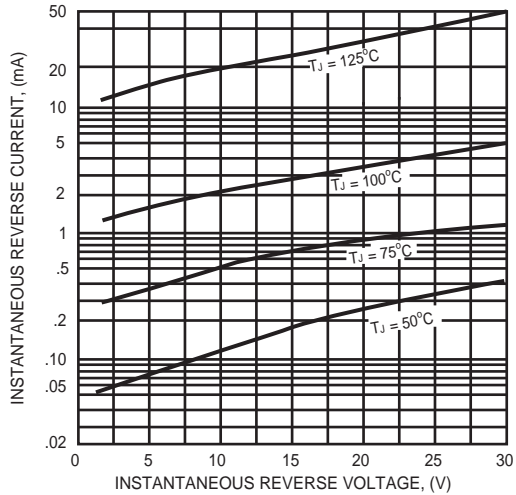


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

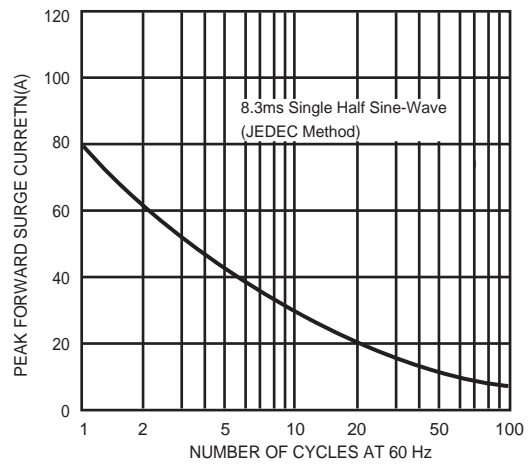


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

