



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 60 Volts CURRENT 1.0 Ampere

SMD16SGP-A

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

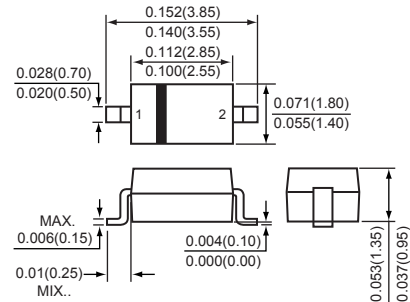
Weight: 0.001 ounce 0.032 gram

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%.



SOD-123



Dimensions in inches and (millimeters)

SOD-123

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

RATINGS	SYMBOL	SMD16SGP-A	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	60	Volts
Maximum RMS Voltage	VRMS	42	Volts
Maximum DC Blocking Voltage	VDC	60	Volts
Maximum Average Forward Rectified Current at TL = 90°C	IO	1.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) TL = 70°C	IFSM	25	Amps
Typical Junction Capacitance (Note 2)	CJ	110	pF
Typical Thermal Resistance (Note 1)	R θJA	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	SMD16SGP-A	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC	VF	0.55	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	IR	45	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 MH z and applied reverse voltage of 4.0 volts

2015-04

RATING CHARACTERISTIC CURVES (SMD16SGP-A)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

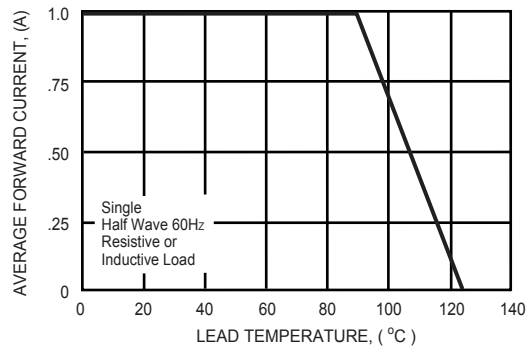


FIG. 2 - TYPICAL FORWARD CHARACTERISTICS

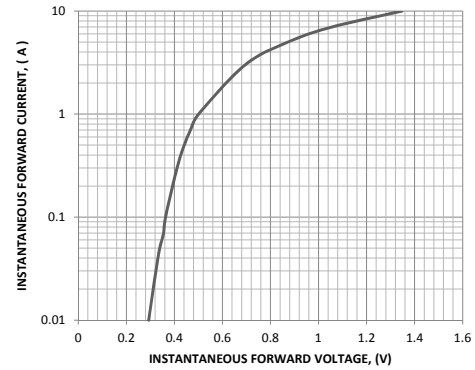


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

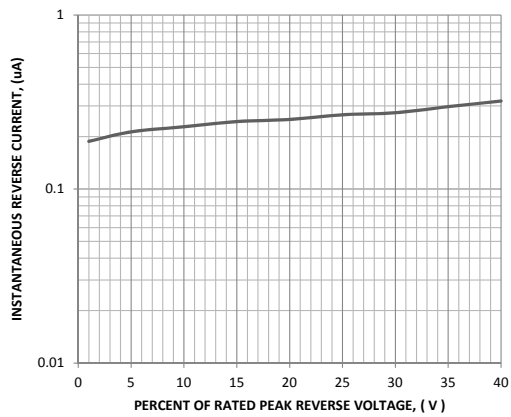


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

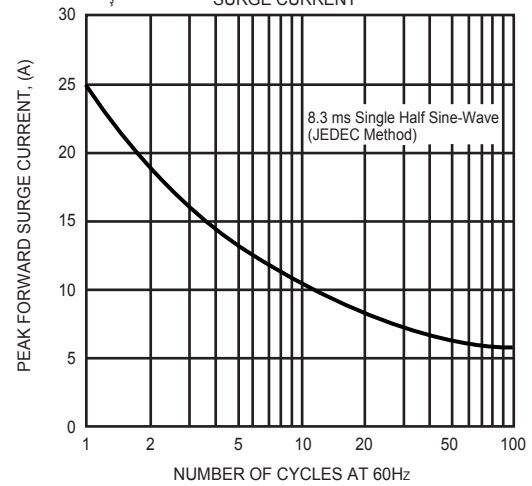
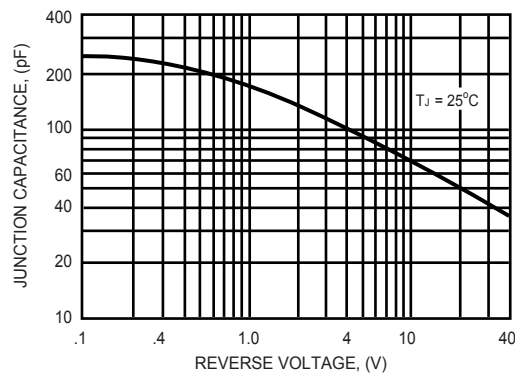


FIG. 5 - TYPICAL JUNCTION CAPACITANCE





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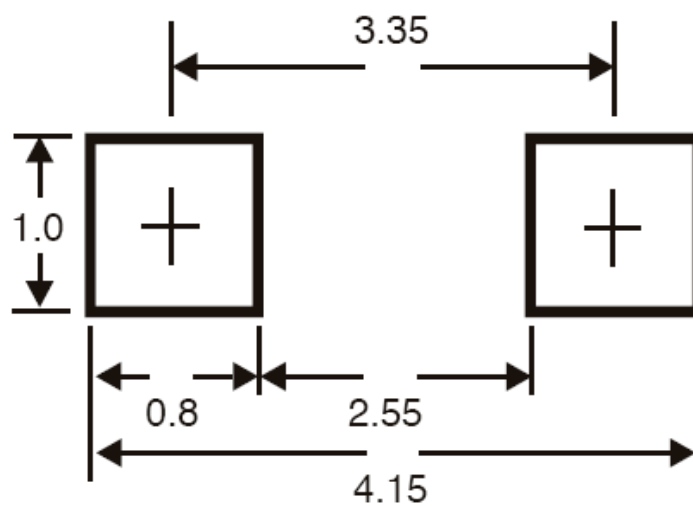
SURFACE MOUNT

RECOMMENDED FOOT PRINT

all dimensions in mm

SOD-123

SOD-123



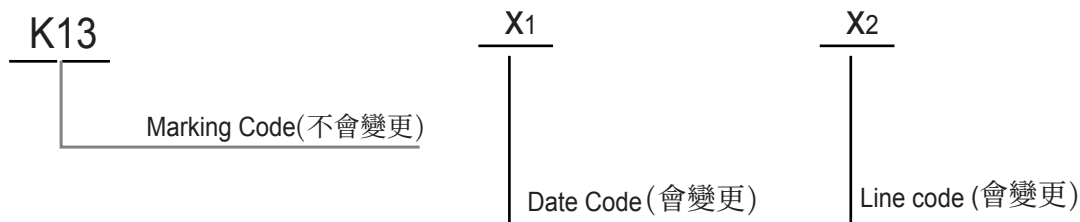
The Marking and Part No. for SMD16SGP-A (SOD-123)

Marking:



* Laser mark for marking code and cathode band

Part No.:



X2 Production line code: (會變更)

X2:" "沒有任何記號表第一條生產線

X2:"2"表第二條生產線

X2:"3"表第三條生產線

Date Code Standard

Date Code	A	B	C	D	E	F	G	H	J	K	L	M
2015Year	JAN.	FEB.	MAR.	APR	MAY	JUNE	JULY	AUG.	SEP.	OCT	NOV.	DEC.

Date Code	N	P	Q	R	S	T	U	V	W	X	Y	Z
2014Year	JAN.	FEB.	MAR.	APR	MAY	JUNE	JULY	AUG.	SEP.	OCT	NOV.	DEC.

CUSTOMER :	APPROVED :	 CHENMKO LTD.
APPROVED :	CHECKED :	
CHECKED :	DRAWN :	
		DRAWING No. :