



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SURFACE MOUNT

FAST SWITCHING DIODE

VOLTAGE RANGE 250 Volts CURRENT 200 mAmpere

CHWD02YSGP-A

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * For surface mounted applications
- * Low profile package
- * Built-in strain relief
- * Low power loss, high efficiency
- * High current capability, low forward voltage drop
- * Power dissipation: 250mW
- * Repetitive peak forward surge current: 625mA
- * 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

MARKING

* K1

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

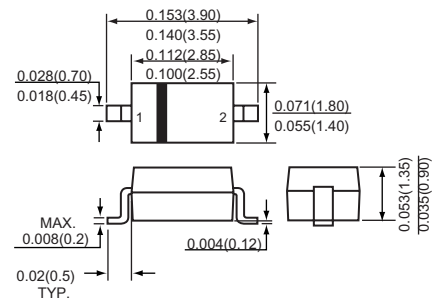
Ratings at 25°C ambient temperature unless otherwise specified.

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	CHWD02YSGP-A	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	250	Volts
Maximum RMS Voltage		VRMS	141	Volts
Maximum DC Blocking Voltage		VDC	200	Volts
Maximum Average Forward Rectified Current at TL = 100°C		Io	200	mAmps
Non-Repetitive Peak Forward Surge Current	@ t=1.0uS	IFSM	2.5	Amps
	@ t=1.0S		0.5	
Typic Junction Capacitance (Note 2)		CJ	5.0	pF
Maximum Reverse Recovery Time (Note 3)		TRR	50	nS
Typical Thermal Resistance (Note 1)		R θJA	833	°C / W
Storage and Operating Temperature Range		TJ, TSTG	-65 to +150	°C

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

CHARACTERISTICS		SYMBOL	CHWD02YSGP-A	UNITS
Maximum Instantaneous Forward Voltage	@ IF = 100 mA	VF	1.00	Volts
	@ IF = 200 mA		1.25	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C	IR	100	nAmps
	@ TJ = 100°C		15	uAmps
Breakdown Voltage(Minimum)		Bv	250	Volts

NOTES : 1.Thermal Resistance (Junction to Lead) : PC Board Mounted on 0.06 X 0.06" (0.15X 0.15mm) copper pad area.
2.Measured at 1.0 MH z and applied reverse voltage of 0 volt.
3. IF=IR=30 mA, IRR=0.1XIR, RL=100 ohms

2015-8

RATING CHARACTERISTIC CURVES (CHWD02YSGP-A)

FIG. 1 - TYPICAL FORWARD CURRENT
DERATING CURVE

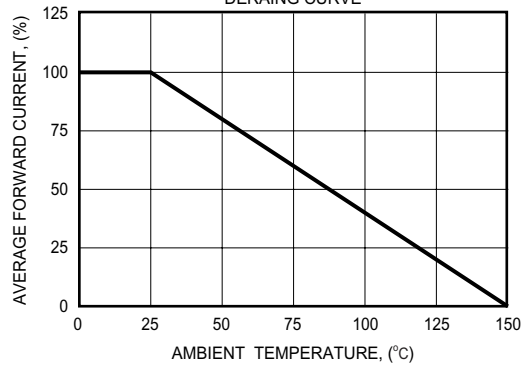


FIG. 2 - FORWARD CHARACTERISTICS

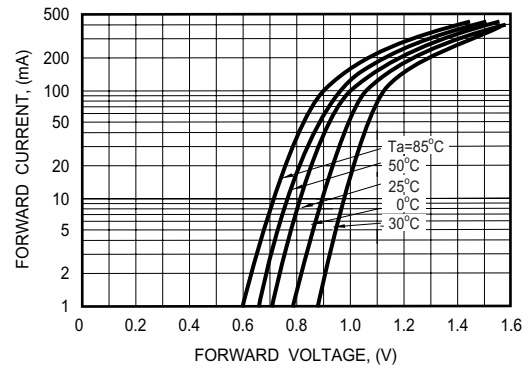


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

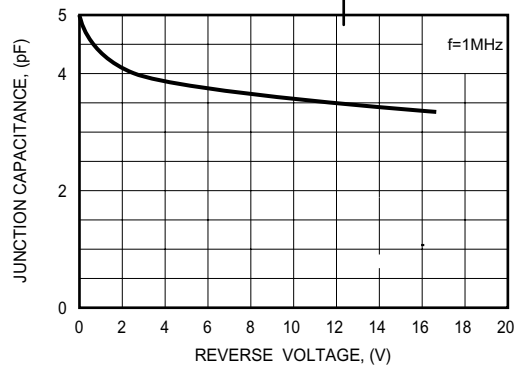
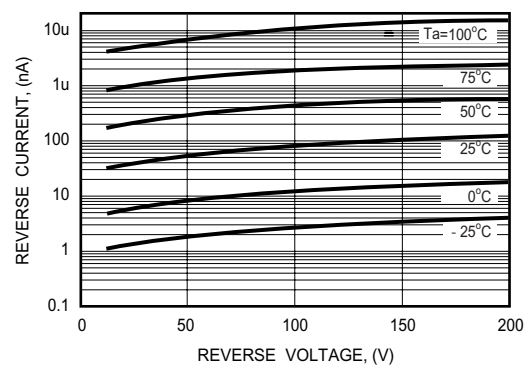


FIG. 4 - REVERSE CHARACTERISTICS



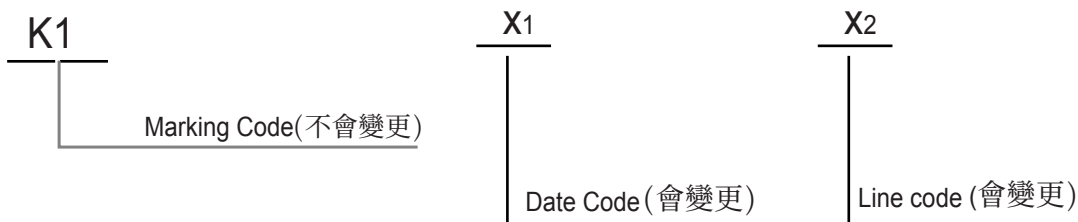
The Marking and Part No. for CHWD02YSGP-A (SOD-123)

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

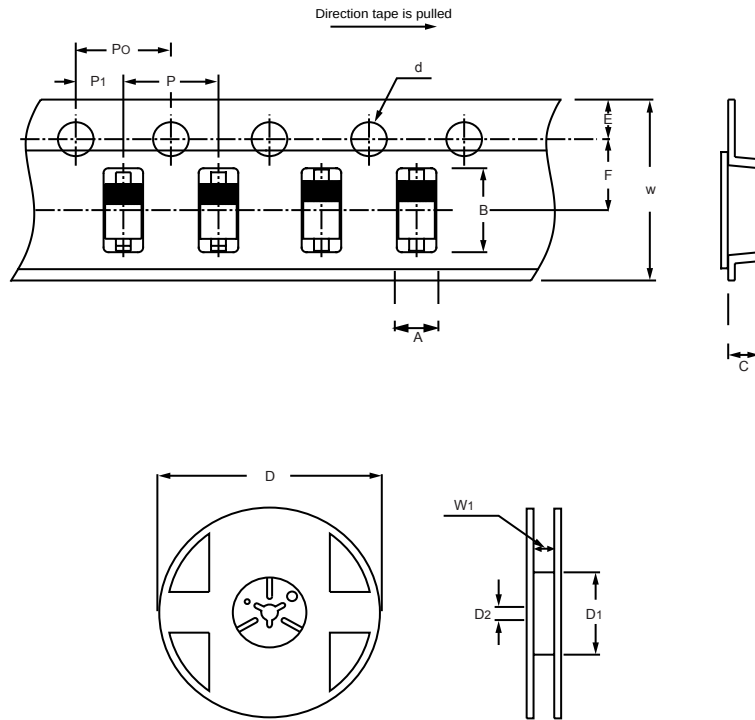
Date Code Standard (二年1個週期)

Date Code	1	2	3	4	5	6	7	8	9	T	V	C
2015Year	JAN.	FEB.	MAR.	APR	MAY	JUNE	JULY	AUG.	SEP.	OCT	NOV.	DEC.

Date Code	E	F	H	J	K	L	N	P	U	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. :

REEL TAPING SPECIFICATIONS FOR SURFACE MOUNT DEVICES - SOD-123



ITEM	SYMBOL	SPECIFICATIONS (mm)	SPECIFICATIONS (inch)
Carrier width	A	1.9±0.1	0.075±0.004
Carrier length	B	4.0±0.1	0.157±0.004
Carrier depth	C	1.5±0.1	0.059±0.004
Sprocket hole	d	1.55±0.05	0.061±0.002
Reel outside diameter	D	180 + 0/-3	7.083 + 0/-0.118
Reel inner diameter	D1	60 + 1/-0	2.361 + 0.039/-0
Feed hole diameter	D2	13±0.2	0.512±0.008
Sprocket hole position	E	1.75±0.1	0.069±0.004
Punch hole position	F	3.5±0.05	0.138±0.002
Punch hole pitch	P	4.0±0.1	0.157±0.004
Sprocket hole pitch	P0	4.0±0.1	0.157±0.004
Embossment center	P1	2.0±0.05	0.079±0.002
Tape width	W	8.0±0.2	0.315±0.008
Reel width	W1	9.0±0.3	0.354±0.012

NOTE: 1. Devices are packed in accordance with EIAJ stand ETX-7001 and specifications listed above.
2. Available on 7 inch (3,000 c.t.) or 13 inch (10,000 c.t.) diameter reels.