



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 40 Volts CURRENT 2.0 Amperes



FEATURES

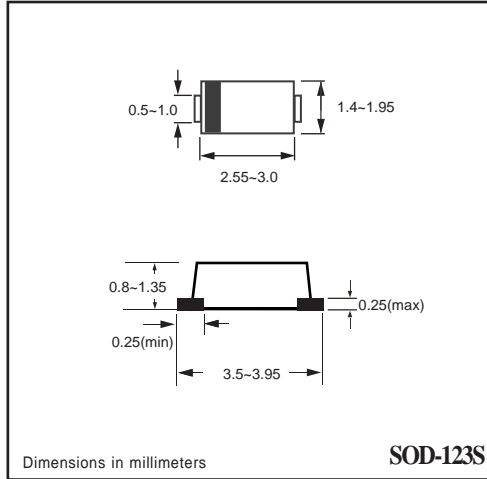
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * For surface mounted applications
- * Low profile package
- * Built-in strain relief
- * Metal silicon junction, majority carrier conduction
- * Low power loss, high efficiency
- * High current capability, low forward 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
- * Low VF Products

MECHANICAL DATA

Case: JEDEC SOD-123S molded plastic
Polarity: Color band denotes cathode end

MARKING

24R



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	SMD24APT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	40	Volts
Maximum RMS Voltage	VRRMS	28	Volts
Maximum DC Blocking Voltage	VDC	40	Volts
Maximum Average Forward Rectified Current	IO	2.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	40	Amps
Typical Junction Capacitance (Note 2)	CJ	200	pF
Typical Thermal Resistance (Note 1)	RθJL	85	°C / W
Operating Temperature Range	TJ	-65 to +125	°C
Storage Temperature Range	TSTG	-65 to +150	°C

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

CHARACTERISTICS	SYMBOL	SMD24APT	UNITS
Maximum Instantaneous Forward Voltage	VF	IF=0.7A @TA=25°C	0.40 Volts
		IF=1.0A @TA=25°C	0.45 Volts
		IF=2.0A @TA=25°C	0.50 Volts
Maximum Average Reverse Current	IR	VR=30V @TA=25°C	50 uAmps
		VR=40V @TA=25°C	0.5 mAmps
		VR=40V @TA=100°C	10 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.

RATING CHARACTERISTIC CURVES (SMD24APT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

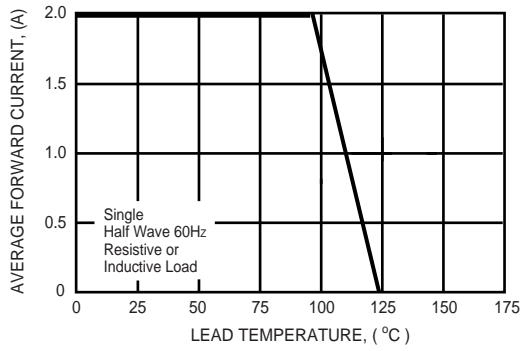


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

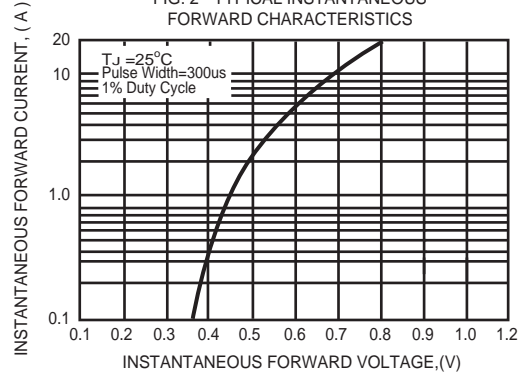


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

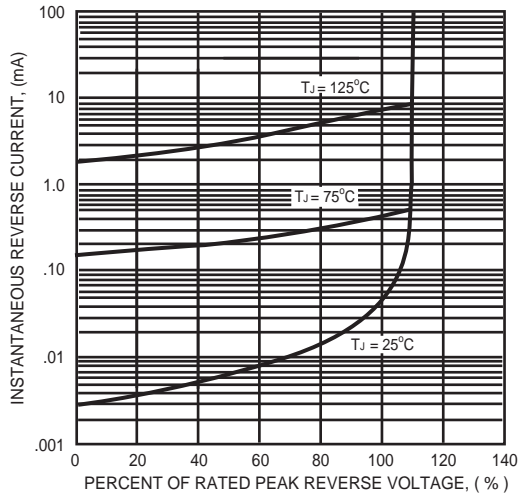


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

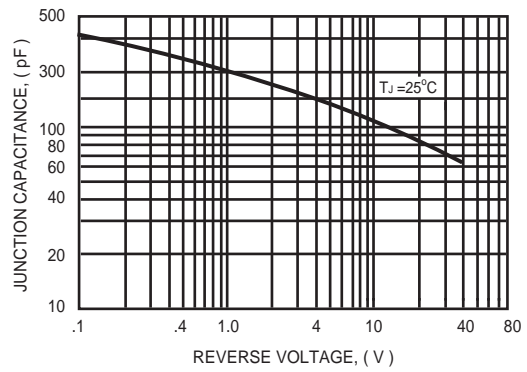


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

