CHENMKO ENTERPRISE CO.,LTD

SMD24AGP

Halogens 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

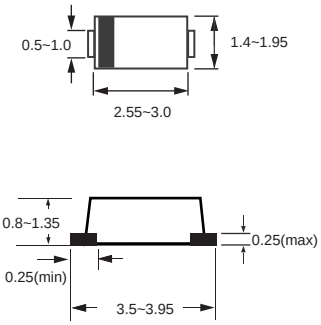
* Low VF Products

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

MARKING
24R



SOD-123S



Dimensions in millimeters

SOD-123S

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 RATINGES (At T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	SMD24AGP	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	Volts
Maximum RMS Voltage	V_{RMS}	28	Volts
Maximum DC Blocking Voltage	V_{DC}	40	Volts
Maximum Average Forward Rectified Current	I_O	2.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	40	Amps
Typical Junction Capacitance (Note 2)	C_J	200	pF
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	85	°C / W
Operating Temperature Range	T_J	-65 to +125	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C

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

CHARACTERISTICS		SYMBOL	SMD24AGP	UNITS
Maximum Instantaneous Forward Voltage	I_F=2.0A @T_A=25 C	V_F	0.50	Volts
Maximum Average Reverse Current	V_R=40V @T_A=25°C	I_R	0.5	mAmps
	V_R=40V @T_A=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 (SMD24AGP)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

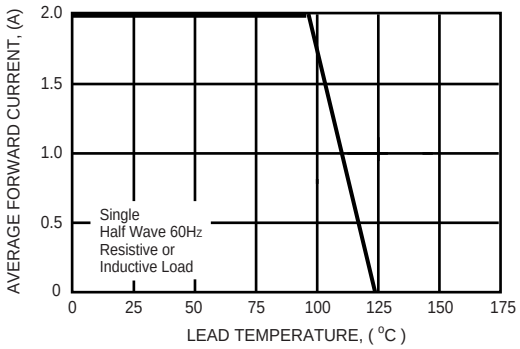


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

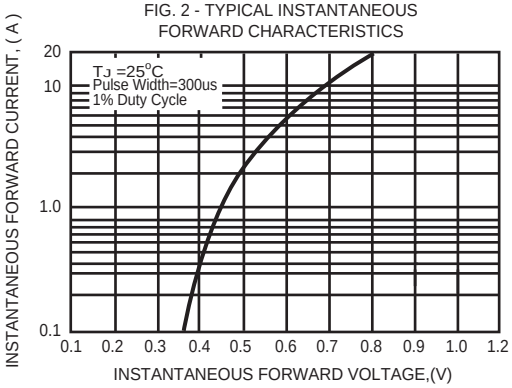


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

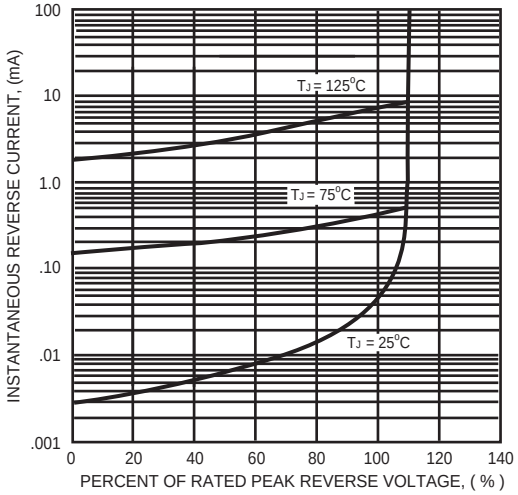


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

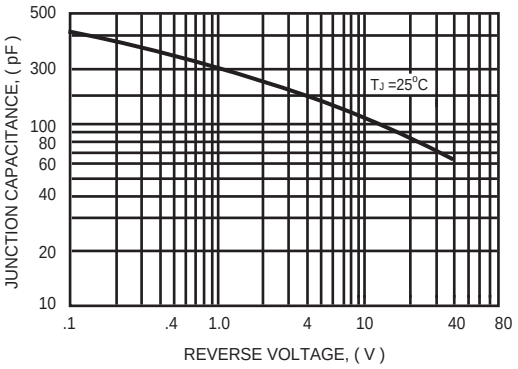


FIG. 5 - MAXIMUM NON-REPETIVE FORWARD SURGE CURRENT

