



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SURFACE MOUNT

GLASS PASSIVATED SILICON RECTIFIER
VOLTAGE RANGE 50 - 1000 Volts CURRENT 1.0 Ampere

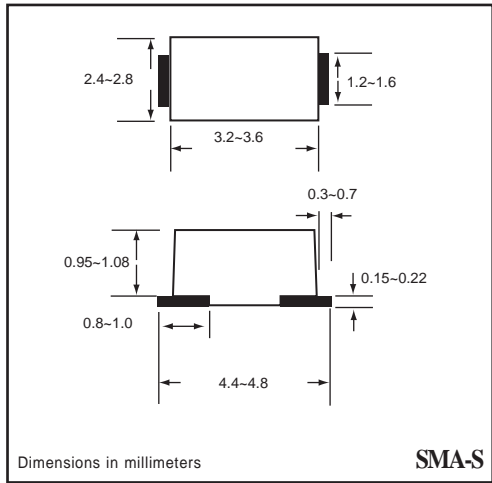
SM4001AGP
THRU
SM4007AGP

FEATURES

- * Low leakage current
- * Ideal for surface mounted applications
- * Metallurgically bonded construction
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Glass passivated junction
- * High temperature soldering guaranteed : 260°C/10 seconds at terminals



SMA-S



Dimensions in millimeters

SMA-S

CIRCUIT



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

RATINGS		SYMBOL	SM4001AGP	SM4002AGP	SM4003AGP	SM4004AGP	SM4005AGP	SM4006AGP	SM4007AGP	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current TL = 90°C		Io	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		IFSM	30							Amps
Typical Junction Capacitance (Note 1)		CJ	15							pF
Maximum Thermal Resistance	(Note 2)	R θ JL	20							°C / W
	(Note 3)	R θ JA	50							°C / W
Operating and Storage Temperature Range		TJ, TSTG	-65 to +175							°C

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

CHARACTERISTICS		SYMBOL	SM4001AGP	SM4002AGP	SM4003AGP	SM4004AGP	SM4005AGP	SM4006AGP	SM4007AGP	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC		VF	1.0							Volts
Maximum Full Load Reverse Current, Full cycle Average at TA = 75°C		IR	30							uAmps
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C		5.0							uAmps
	@ TA = 125°C		50							uAmps

- NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
2. Thermal Resistance Junction to terminal, 6.0 mm² copper pads to each terminal
3. Thermal Resistance Junction to ambient, 6.0 mm² copper pads to each terminal

RATING CHARACTERISTIC CURVES (SM4001AGP THRU SM4007AGP)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

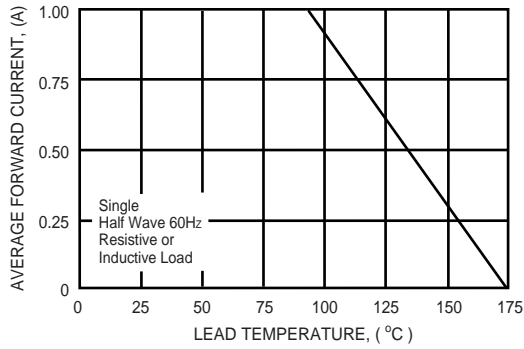


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

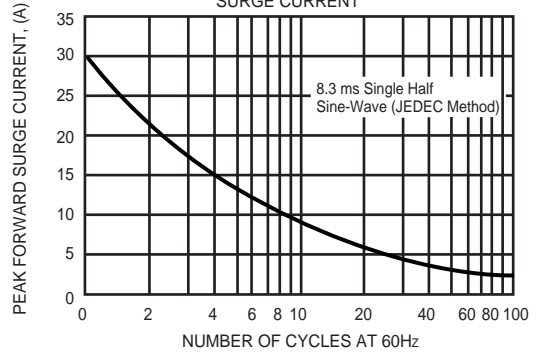


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

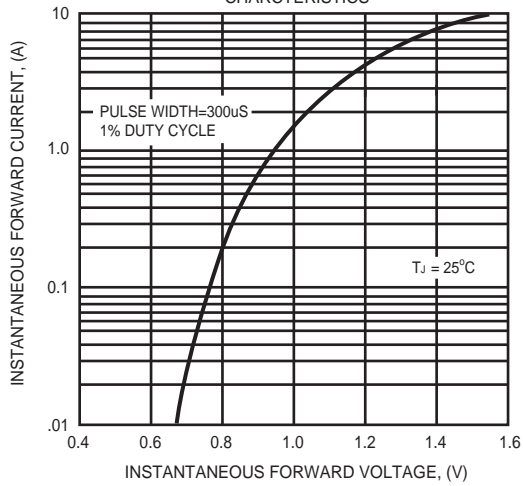


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

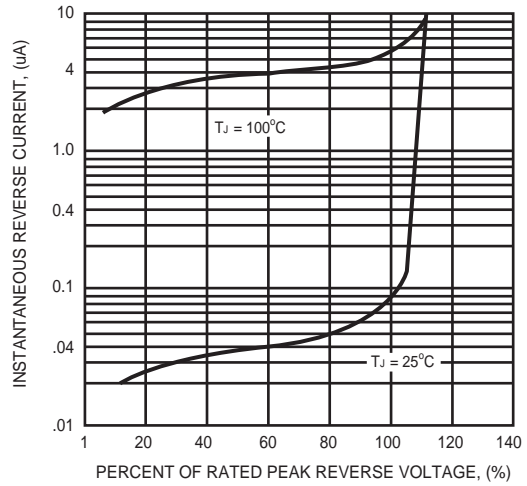


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

