



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SURFACE MOUNT

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

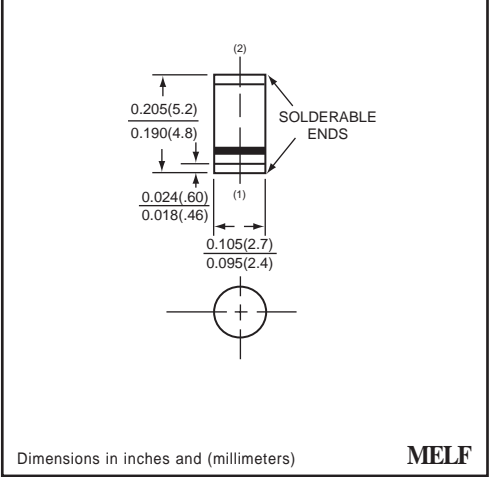
**SR4001GP
THRU
SR4007GP**

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

MECHANICAL DATA

Case: JEDEC MELF molded plastic
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Indicated by cathode band
Weight: 0.116 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%.

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

RATINGS		SYMBOL	SR4001GP	SR4002GP	SR4003GP	SR4004GP	SR4005GP	SR4006GP	SR4007GP	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 TA = 75°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 θJL	20							°C / W
	(Note 3)	R θJA	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	SR4001GP	SR4002GP	SR4003GP	SR4004GP	SR4005GP	SR4006GP	SR4007GP	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 (SR4001GP THRU SR4007GP)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

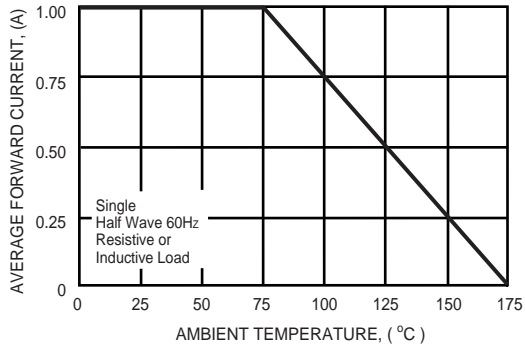


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

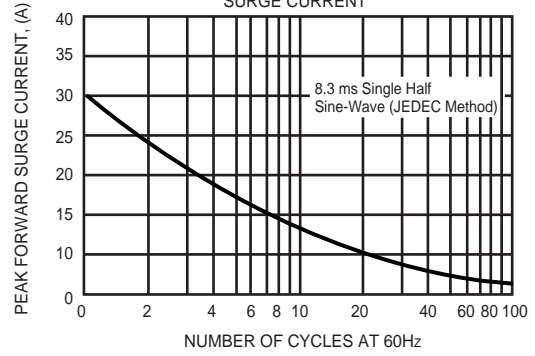


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

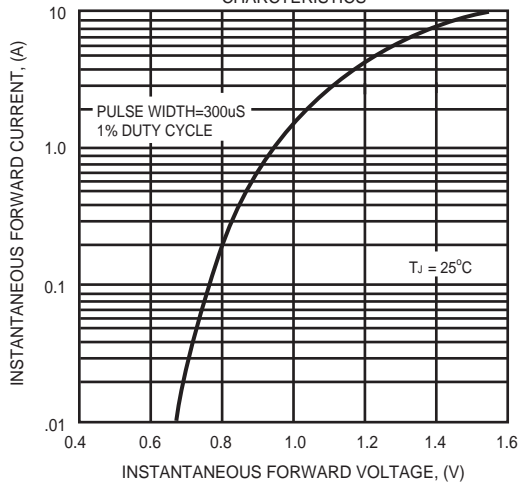


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

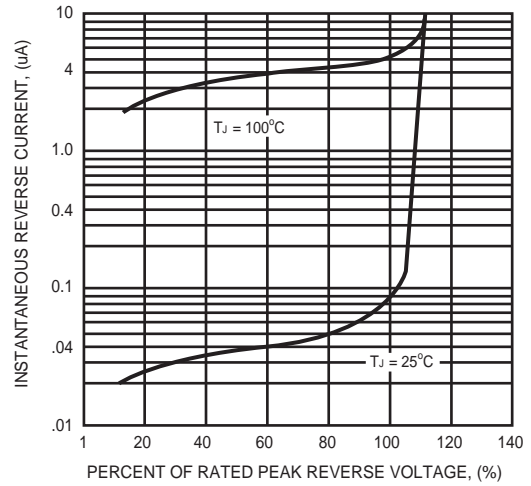


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

