



SGC10DHTHRU SGC10MH

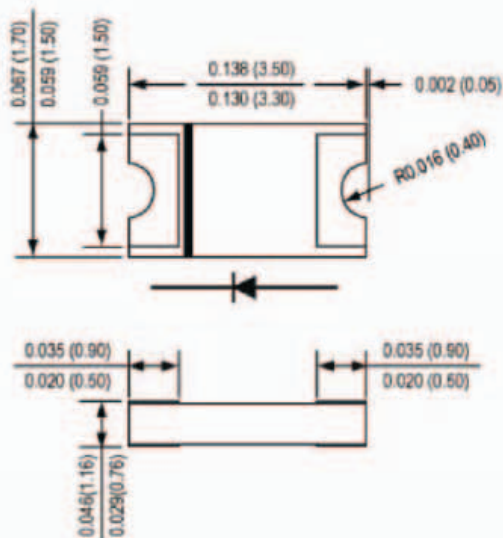
SURFACE MOUNT GLASS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage - 200 to 1000 Volts

Forward Current - 1.0 Ampere

PATENTED

1206-S



*Dimensions in inches and (millimeters)

SuperChipTM
SUPEREX IITM



* Equivalent to SOD87, GL1M, SOD123

FEATURES

- * Halogen-free type
- * Lead free product, compliance to RoHs
- * Lead less chip form, no lead damage
- * Lead-free solder joint, no wire bond & lead frame
- * Low power loss, High efficiency
- * High current capability
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0

MECHANICAL DATA

Case : Packed with FRP substrate and epoxy underfilled

Terminals : Pure Tin plated (Lead-Free),
solderable per MIL-STD-750, Method 2026.

Polarity : Cathode Band, Laser marking

Weight : 0.012 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.	SYMBOLS	SGC10DH	SGC10GH	SGC10JH	SGC10KH	SGC10MH	UNITS
Maximum repetitive peak reverse voltage	VRRM	200	400	600	800	1000	Volts
Maximum RMS voltage	VRMS	140	280	420	560	700	Volts
Maximum DC blocking voltage	VDC	200	400	600	800	1000	Volts
Maximum average forward rectified current (SEE FIG.1)	I (AV)	1.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	15					Amps
Maximum instantaneous forward voltage at 1.0 A	VF	1.0					Volts
Maximum DC reverse current at rated DC blocking voltage TA=25°C TA=125°C TA=150°C	IR	2 30 50					uA
Typical junction capacitance (NOTE 1)	CJ	12					pF
Typical thermal resistance (NOTE 2)	RθJA RθJL	80 40					°C / W
Operating junction and storage temperature range	TJ,TSTG	-65 to +175					°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(2) Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES SGC10DH THUR SGC10MH

FIG.1 - FORWARD CURRENT DERATING CURVE

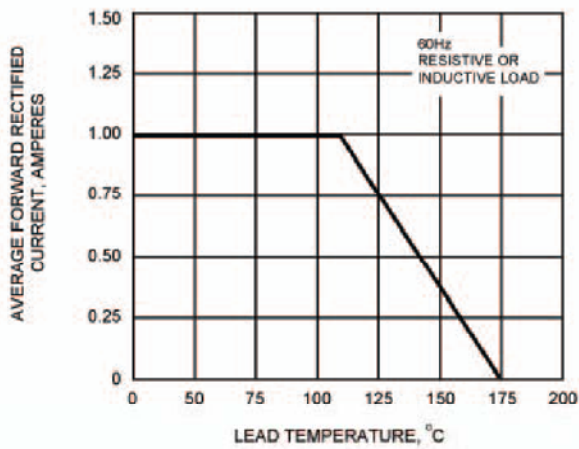


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

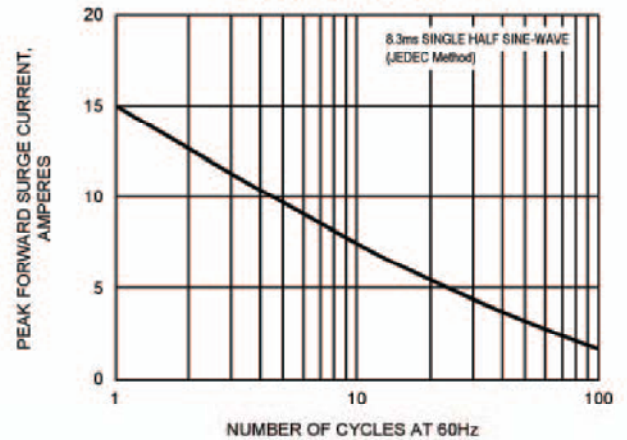


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

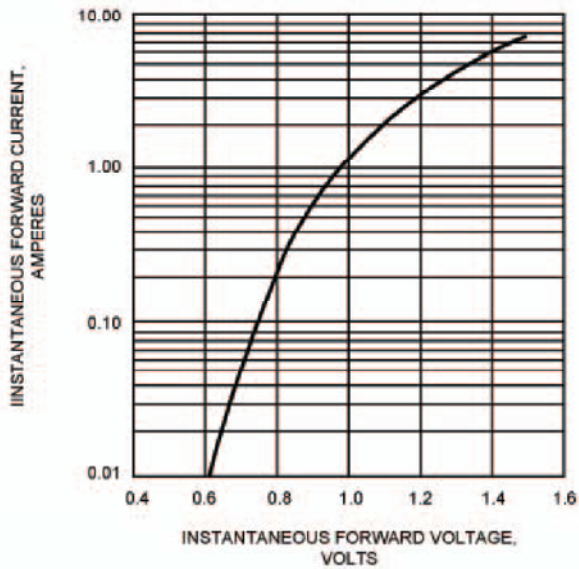


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

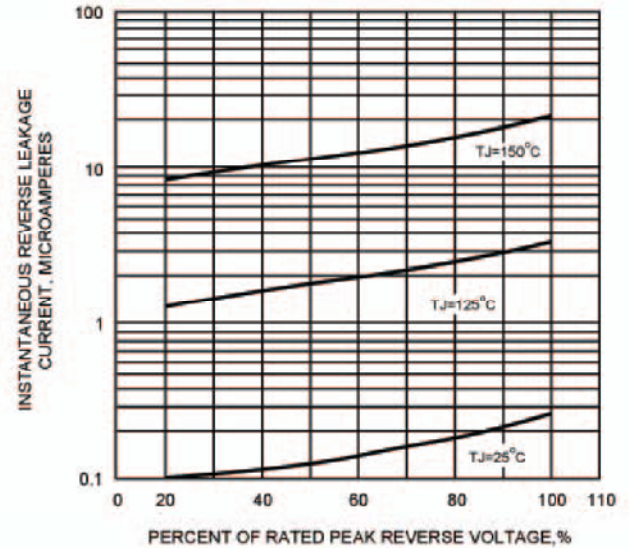


FIG.5 - TYPICAL JUNCTION CAPACITANCE

