



SUGC10DH THRU SUGC10KH

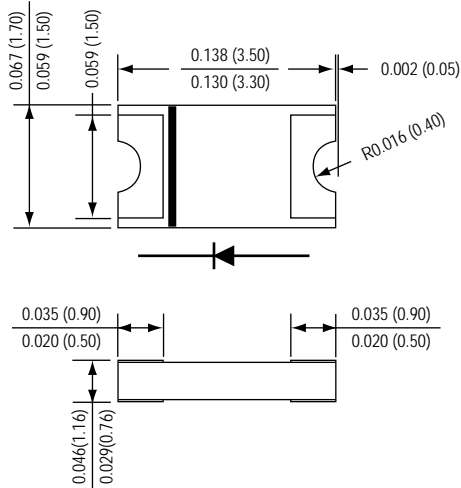
SURFACE MOUNT GLASS PASSIVATED JUNCTION ULTRAFAST EFFICIENT RECTIFIER

Reverse Voltage - 200 to 800 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
- * Leadless chip form, no lead damage
- * Lead-free solder Joint, No Wire bond & Lead Frame
- * Low profile package
- * For surface mounted applications
- * Built-in strain relief
- * Low power loss, High efficiency
- * High current capability
- * High surge capacity
- * 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	SUGC10DH	SUGC10GH	SUGC10JH	SUGC10KH	UNITS
Maximum repetitive peak reverse voltage	VRRM	200	400	600	800	Volts
Maximum RMS voltage	VRMS	140	280	420	560	Volts
Maximum DC blocking voltage	VDC	200	400	600	800	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	IFSM	15				Amps
Maximum instantaneous forward voltage at 1.0 A	VF	0.96	1.30	1.70	2.50	Volts
Maximum DC reverse current at rated DC blocking voltage	IR	5 50				uA
Maximum reverse recovery time (NOTE 1)	trr	35				nS
Typical junction capacitance (NOTE 2)	CJ	10				pF
Operating junction and storage temperature range	TJ,TSTG	-65 to +175				°C

NOTES : (1) Reverse recovery test condition : IF 0.5A, IR=1.0A, Irr=0.25A
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
(3) Preliminary draft.

RATINGS AND CHARACTERISTIC CURVES SUGC10DH THRU SUGC10KH

FIG.1 - FORWARD CURRENT DERATING CURVE

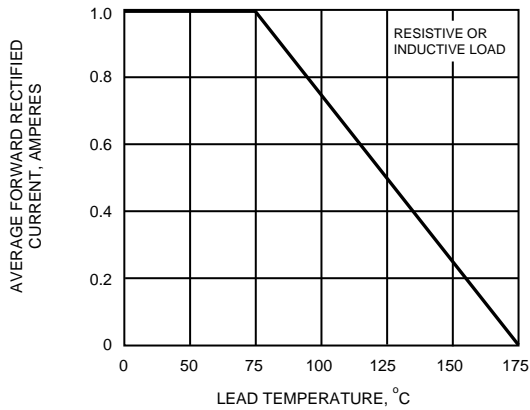


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

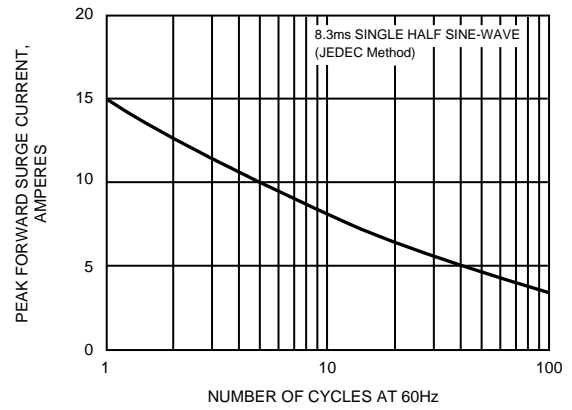


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

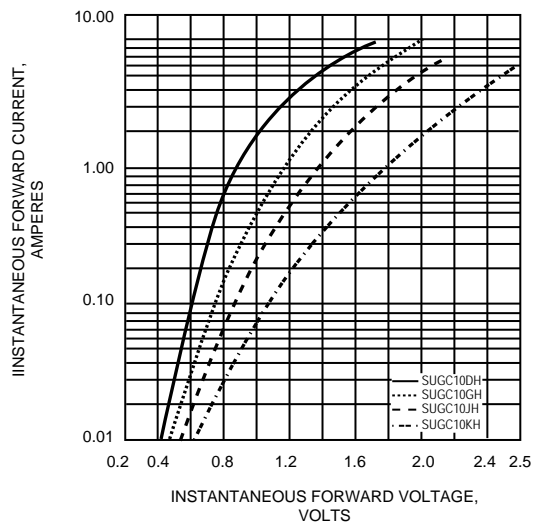


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

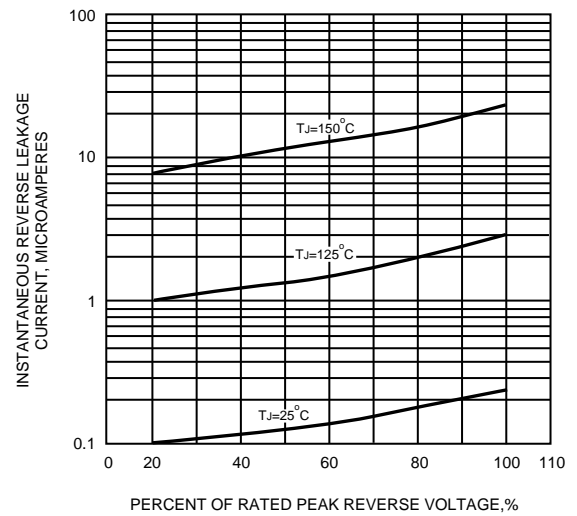


FIG.5 - TYPICAL JUNCTION CAPACITANCE

