

SUGC08KH

● **FEATURES**

- * Halogen-free type
- * Lead free product, compliance to RoHS
- * GPRC (Glass passivated rectifier chip) inside
- * Lead less chip form, no lead damage
- * Lead-free solder joint, no wire bond & lead frame
- * For surface mounted applications
- * Low power loss, High efficiency
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0

● **APPLICATION**

- * Switching mode power supply applications
- * Portable equipment battery applications
- * General rectification
- * DC / DC Converter
- * Telecommunication

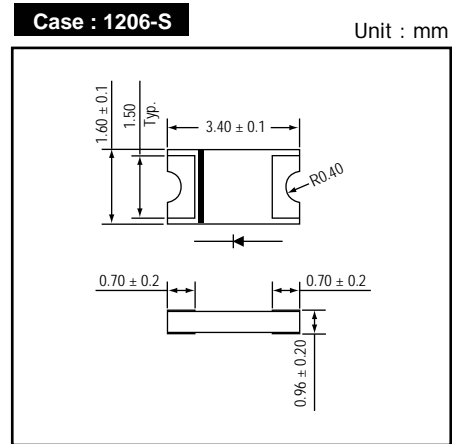
● **MECHANICAL DATA**

Case : Packed with FRP substrate and epoxy underfilled
Terminals : Pure Tin plated (Lead-Free), solderable per MIL-STD-750, Method 2026.
Polarity : Laser Cathode band marking
Weight : 0.012 gram

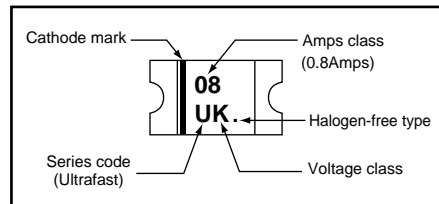
● **PACKING**

- * 3,000 pieces per 7" (178mm ± 2mm) reel
- * 4 reels per box
- * 6 boxes per carton

● **OUTLINE DIMENSIONS**



● **MARKING**



Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	SUGC08KH	Unit
Repetitive peak reverse voltage	V _{RRM}	T _L = 25 °C	800	V
Average forward current	I _{F(AV)}		0.8	A
Peak forward surge current	I _{FSM}	8.3ms single half sine-wave	15	A
Reverse recovery time	T _{rr}	I _F = 0.5A, I _R = 1.0A, I _{rr} = 0.25A	35	nS
Operating junction and storage temperature Range	T _j , T _{STG}		-65 to +175	°C

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V _F	I _F = 0.8A	-	-	2.50	V
Repetitive peak reverse current	I _{RRM}	V _R = Max. V _{RRM} , Ta = 25 °C	-	-	5	uA
Junction capacitance	C _j	V _R = 4V, f = 1.0 MHz	-	10	-	pF
Thermal resistance	R _{th(JA)}	Junction to ambient *	-	90	-	°C/W
	R _{th(JL)}	Junction to lead *	-	40	-	

* 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.

FIG.1 - FORWARD CURRENT DERATING CURVE

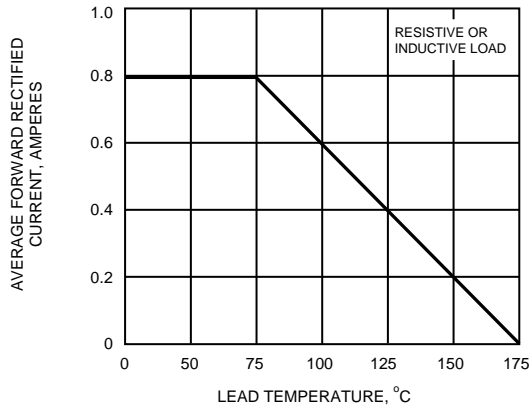


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

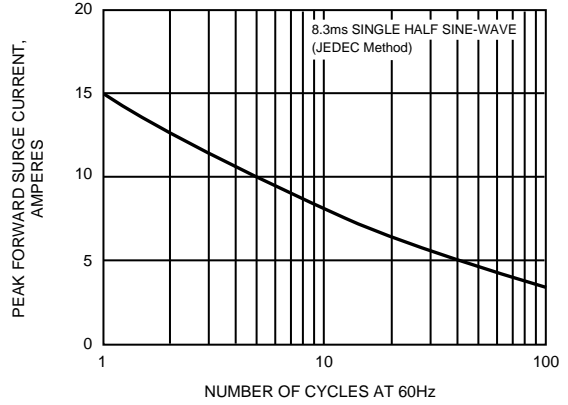


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

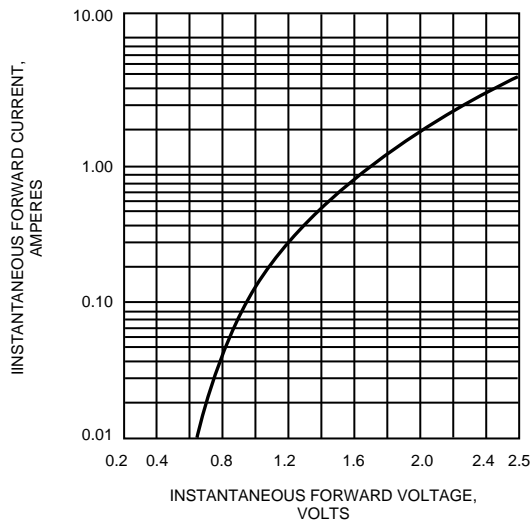


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

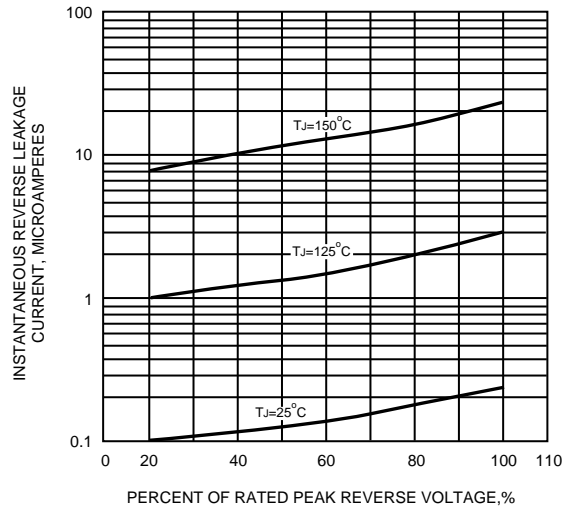


FIG.5 - TYPICAL JUNCTION CAPACITANCE

