GC10DLH THRU GC10MLH
Low VF Rectifier Diode

● FEATURES

* Halogen-free type
* Lead free product, compliance to RoHS
* GPRC (Glass passivated rectifier chip) inside
* Glass passivated cavity-free junction
* Lead less chip form, no lead damage
* Low forward voltage drop
* Plastic package has Underwriters Laboratory Flammability Classification 94V-0

● APPLICATION

* General purpose rectification
* Surge absorption

● 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 : 0.02 gram

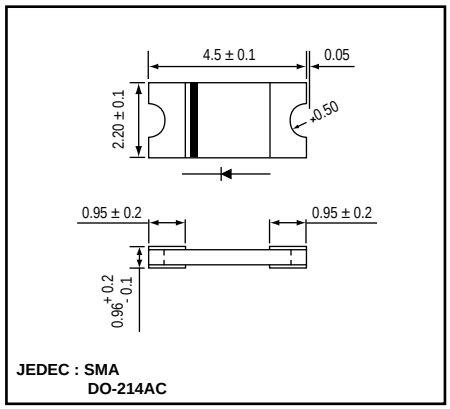
● PACKING

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

● OUTLINE DIMENSIONS

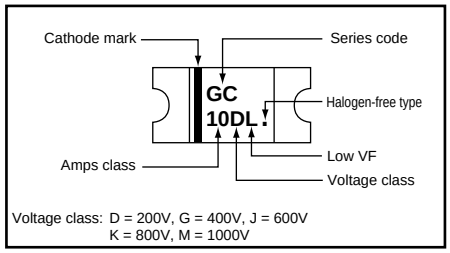
Case : 2010

Unit : mm



JEDEC : SMA
DO-214AC

● MARKING



Voltage class: D = 200V, G = 400V, J = 600V
K = 800V, M = 1000V

Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Rating					Unit
		GC10DLH	*GC10GLH*	*GC10JLH*	*GC10KLH*	*GC10MLH*	
Repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Average forward current	$I_{F(AV)}$	1.0					A
Peak forward surge current (8.3ms single half sine-wave)	I_{FSM}	45					
Operating junction temperature Range	T_j	-65 to +175					°C
Storage temperature Range	T_{STG}	-65 to +175					

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	I_F = 1.0A	-	0.90	0.92	V
Repetitive peak reverse current	I_{RRM}	V_R = Max. V_{RRM} , Ta = 25 °C	-	0.08	5	uA
Junction capacitance	C_j	V_R = 4V, f = 1.0 MHz	-	10	-	pF
Thermal resistance	$R_{th(JA)}$	Junction to ambient (NOTE)	-	70	-	°C/W
	$R_{th(JL)}$	Junction to lead (NOTE)	-	12	-	

NOTES : (1) 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.
(2) Preliminary draft.

FIG.1 - FORWARD CURRENT DERATING CURVE

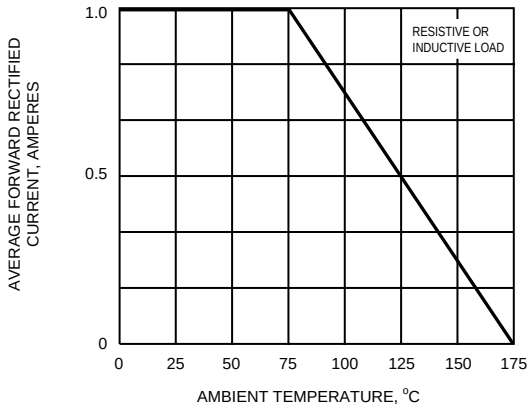


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

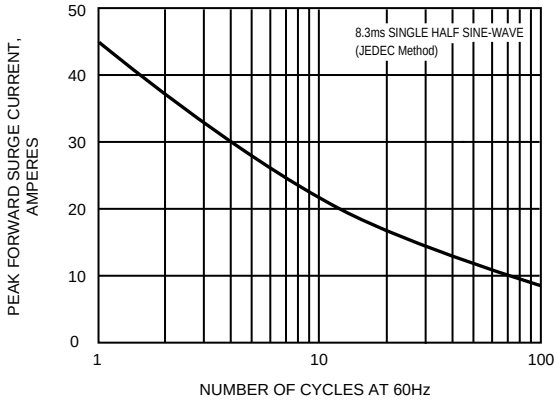


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

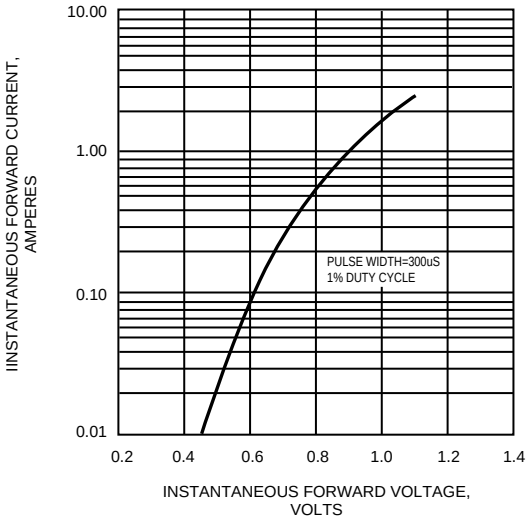


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

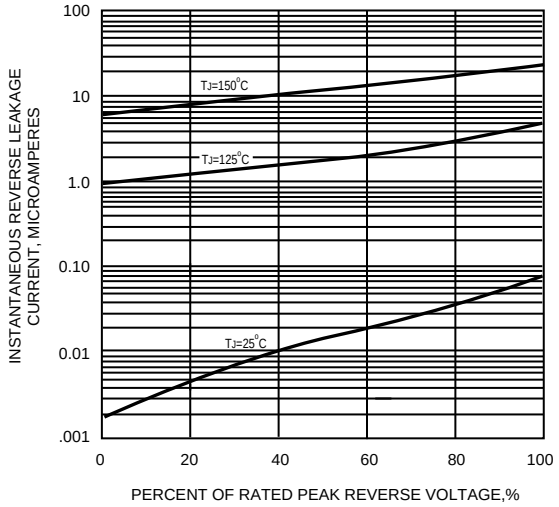
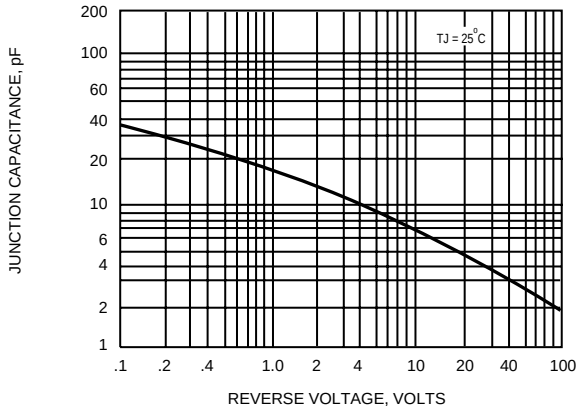



FIG.5 - TYPICAL JUNCTION CAPACITANCE