ZOWIE

Fast Recovery Rectifier

(1000V / 1.0A)

RGC10MLH

FEATURES

* Halogen-free type
* Compliance to RoHS product
* GPRC (Glass passivated rectifier chip) inside
* Glass passivated cavity-free junction
* Lead less chip form, no lead damage
* Low power loss, High efficiency
* High current capability
* 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

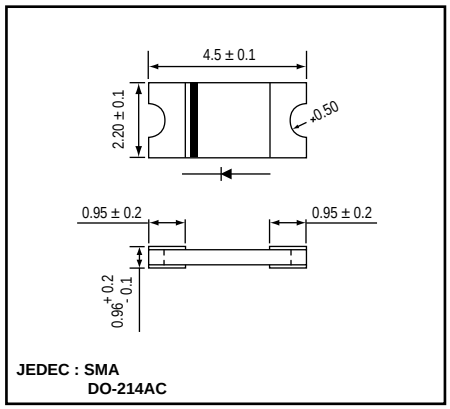
PACKING

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

OUTLINE DIMENSIONS

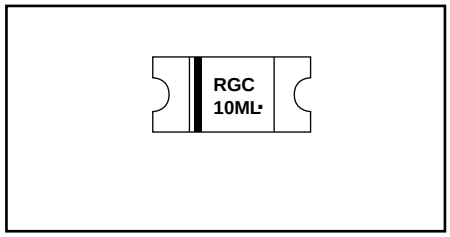
Case : 2010

Unit : mm



JEDEC : SMA
DO-214AC

MARKING



Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	*Rating*	Unit
Repetitive peak reverse voltage	V_{RRM}		1000	V
Average forward current	$I_{F(AV)}$		1.0	A
Peak forward surge current	I_{FSM}	8.3ms single half sine-wave	60	A
Reverse recovery time	T_{rr}	I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A	500	nS
Operating storage temperature Range	T_j,T_{STG}		-65 to +175	°C

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	I_F = 1.0A	-	1.00	1.20	V
Repetitive peak reverse current	I_{RRM}	V_R = Max. V_{RRM} , Ta = 25 °C	-	0.10	1	uA
Junction capacitance	C_j	V_R = 4V, f = 1.0 MHz	-	16	-	pF
Thermal resistance	$R_{th(JA)}$	Junction to ambient (NOTE)	-	94	-	°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

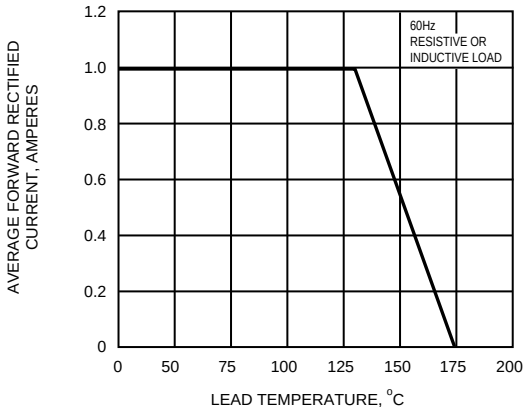


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

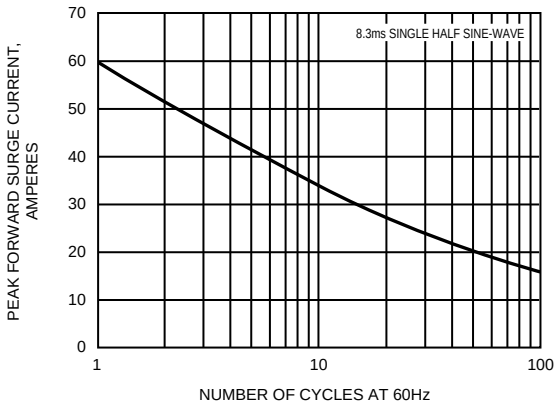


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

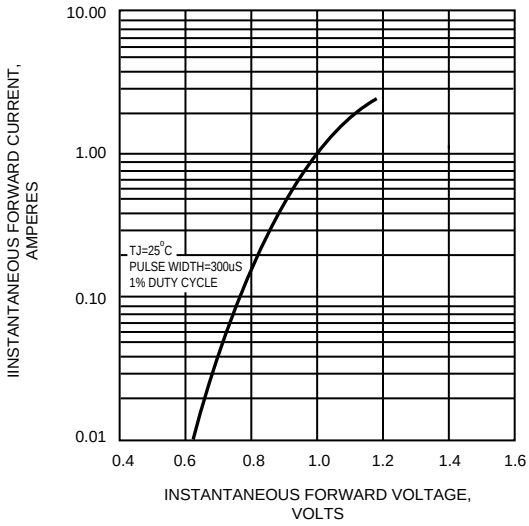


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

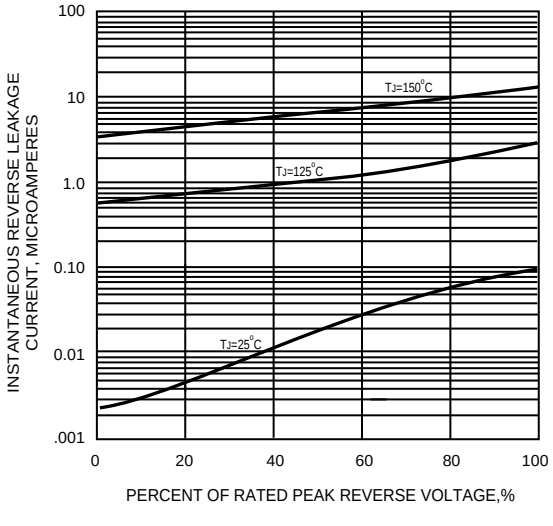


FIG.5 - TYPICAL JUNCTION CAPACITANCE