

**SURFACE MOUNT  
RECTIFIERS**

**VOLTAGE RANGE: 50 --- 1000 V  
CURRENT: 1.0 A**

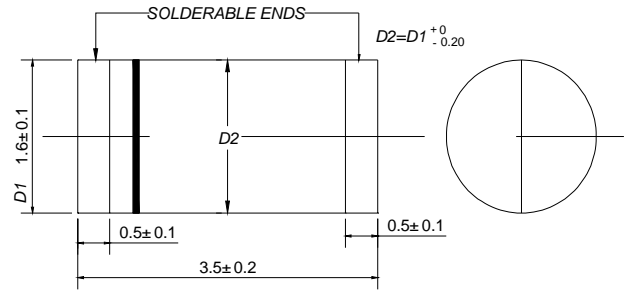
**FEATURES**

- Plastic package has underwriters laboratories flammability classification 94V-0
- Glass passivated chip junction
- For surface mount applications
- High temperature metallurgically bonded construction
- Cavity-free glass passivated junction
- High temperature soldering guaranteed: 450 /5 seconds at terminals. Complete device sub-mersible temperature of 265 for 10 seconds in solder bath

**MECHANICAL DATA**

- Case: JEDEC DO-213AA, molded plastic
- Terminals: Axial lead ,solderable per MIL- STD-750, Method 2026
- Polarity: Color band denotes cathode
- Weight: 0.0014 ounces, 0.036 grams
- Mounting position: Any

DO - 213AA



Dimensions in millimeters

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

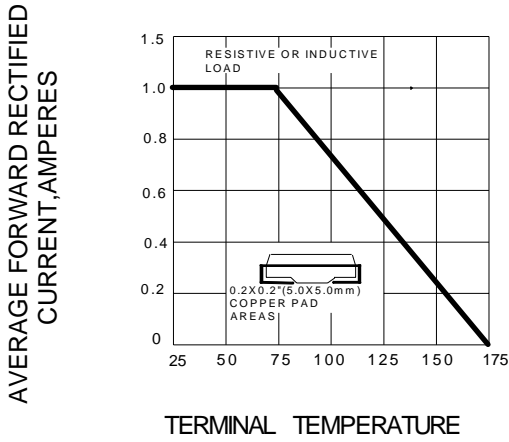
		RGL 1A	RGL 1B	RGL 1D	RGL 1G	RGL 1J	RGL 1K	RGL 1M	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current $T_T=75$	$I_{(AV)}$	1.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	25							A
Maximum instantaneous forward voltage @1.0A	$V_F$	1.3							V
Maximum reverse current @ $T_A=25$ at rated DC blocking voltage @ $T_A=125$	$I_R$	5.0 50							$\mu A$
Maximum reverse recovery time (Note 1)	$t_{rr}$	150				250	500		ns
Typical thermal resistance (Note 3)	$R_{\theta JA}$	150							/W
Operating junction temperature range	$T_j$	- 55 ---- +175							
Storage temperature range	$T_{STG}$	- 55 ---- +175							

NOTE: 1. Measured with  $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$

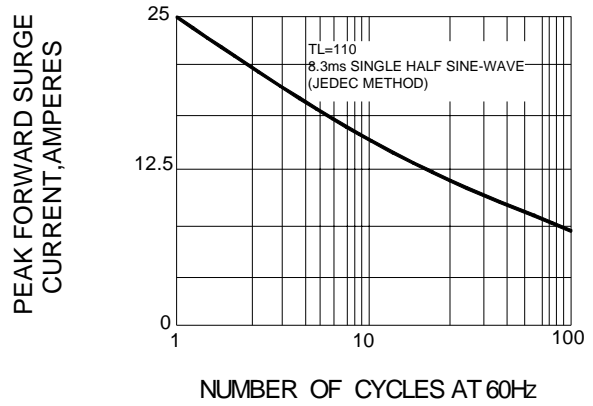
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance from junction to ambient, 0.24x0.24"(6.0x6.0mm) copper pads to each terminal.

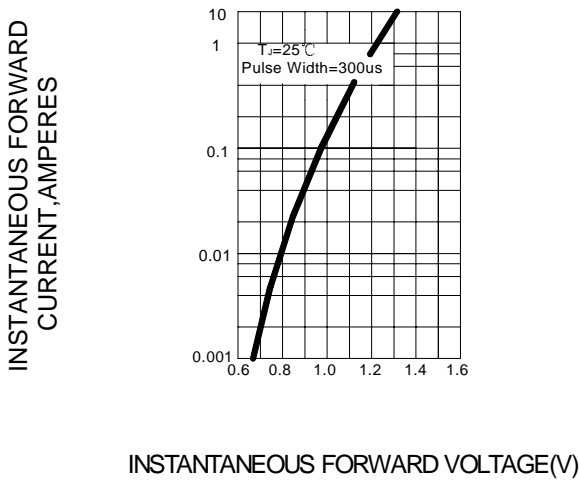
**FIG.1 – FORWARD CURRENT DERATING CURVE**



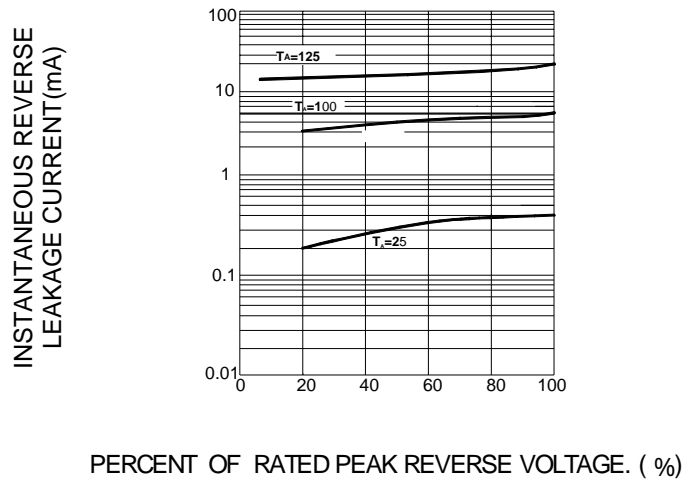
**FIG.2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



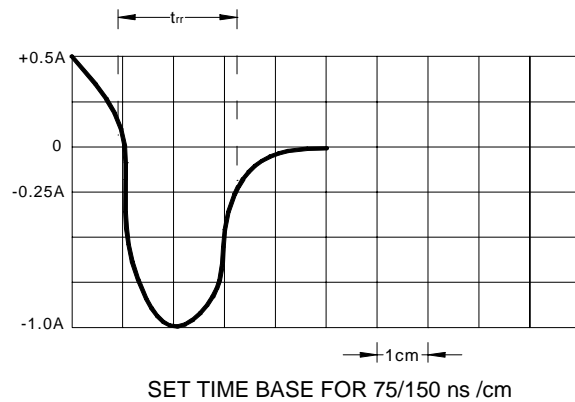
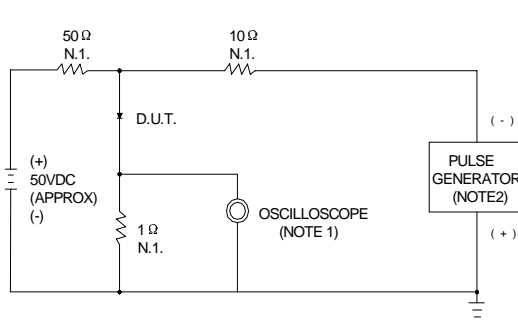
**FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**



**FIG.5 – REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



NOTES:1.RISE TIME=7ns MAX. INPUT IMPEDANCE=1MΩ.22pF  
2.RISE TIME=10ns MAX. SOURCE IMPEDANCE=50Ω