

# RGL34A-RGL34M

Surface Mount Rectifiers

**VOLTAGE RANGE: 50 --- 1000 V**

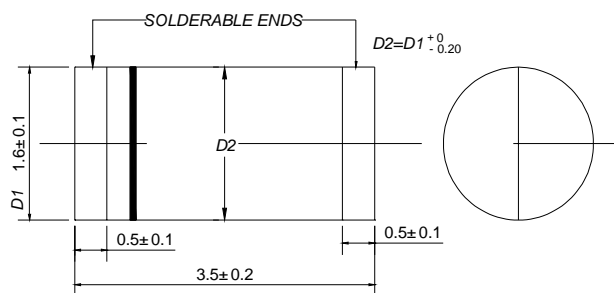
**CURRENT: 0.5 A**



## 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

## DO - 213AA



Dimensions in millimeters

## Mechanical Data

- Case: JEDEC DO-213AA,molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.0014 ounces, 0.036 grams
- Mounting position: Any

## 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 34A	RGL 34B	RGL 34D	RGL 34G	RGL 34J	RGL 34K	RGL 34M	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 $T_T=55$	$I_{(AV)}$	0.5							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	10							A
Maximum instantaneous forward voltage @0.5A	$V_F$	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 junction capacitance (Note 2)	$C_j$	4.0							pF
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							

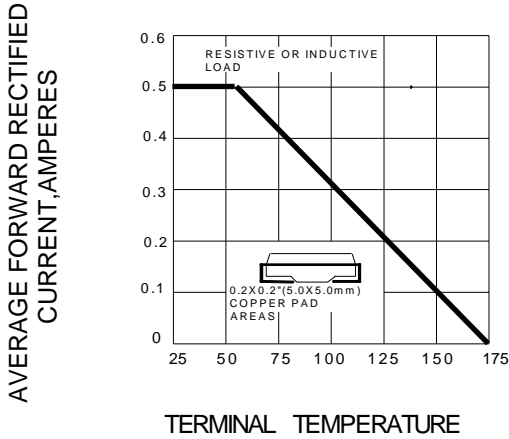
NOTE: 1. Measured with  $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$

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

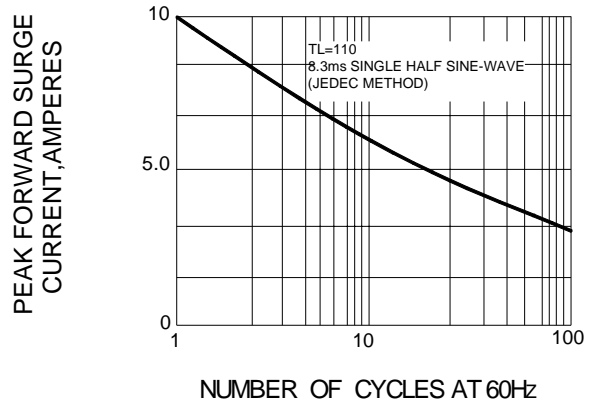
3. Thermal resistance from junction to ambient, 0.24x0.24"(6.0x6.0mm) copper pads to each terminal.

## Ratings AND Characteristic Curves

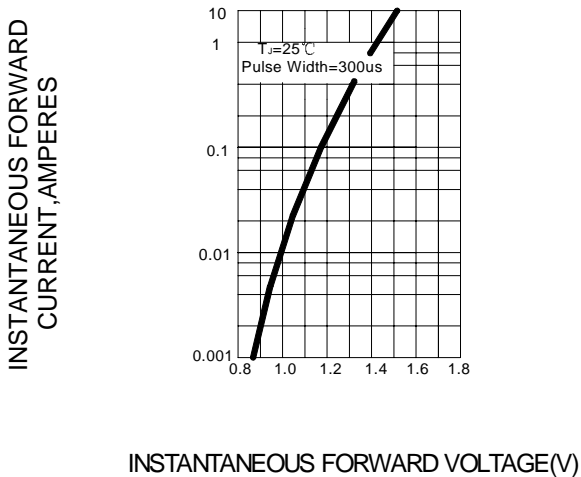
**FIG.1 – FORWARD CURRENT DERATING CURVE**



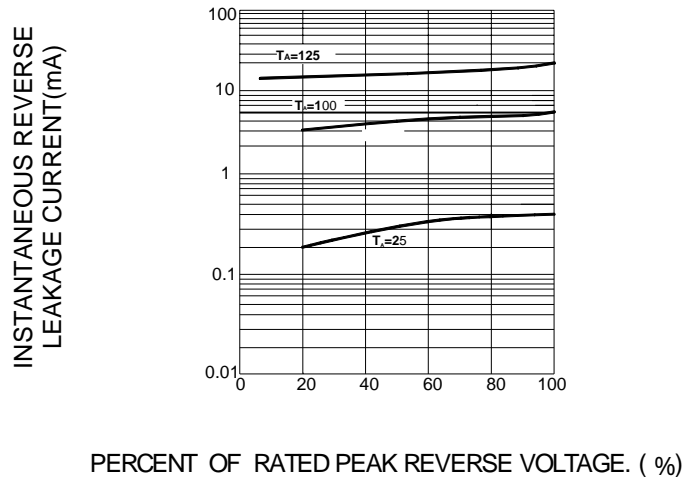
**FIG.2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



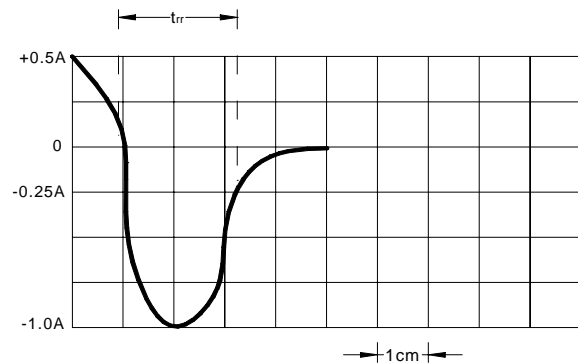
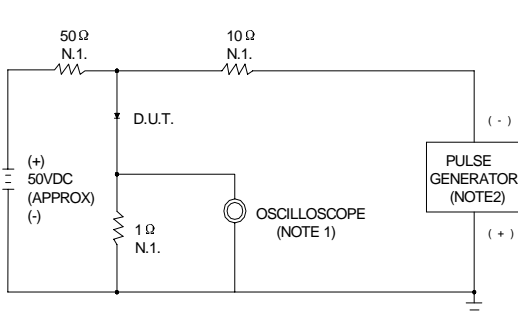
**FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**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

SET TIME BASE FOR 75/150 ns/cm