

# RGL34A THRU RGL34J

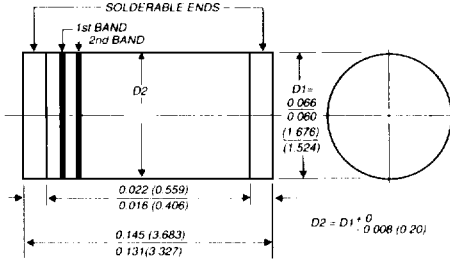
**SURFACE MOUNT GLASS PASSIVATED JUNCTION FAST SWITCHING RECTIFIER**

*Reverse Voltage - 50 to 600 Volts*

*Forward Current - 0.5 Ampere*

**PATENTED \***

**DO-213AA**



1st band denotes type and polarity  
2nd band denotes voltage type

Dimensions in inches and (millimeters)

\* Glass-plastic encapsulation technique is covered by

Patent No.3.996.602 and brazed-lead assembly by Patent No.3.930.306



## FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mount applications
- ◆ High temperature metallurgically bonded construction
- ◆ Glass passivated cavity-free junction
- ◆ Capable of meeting environmental standards of MIL-S-19500
- ◆ Fast switching for high efficiency
- ◆ High temperature soldering guaranteed: 450°C/5 seconds at terminals. Complete device submersible temperature of 260°C for 10 seconds in solder bath

## MECHANICAL DATA

**Case:** JEDEC DO213AA molded plastic over glass body  
**Terminals:** Plated terminals, solderable per MIL-STD-750, Method 2026

**Polarity:** Two bands indicate cathode end - 1st band denotes device type and 2nd band denotes repetitive peak reverse voltage rating

**Mounting Position:** Any

**Weight:** 0.0014 ounce, 0.036 gram

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

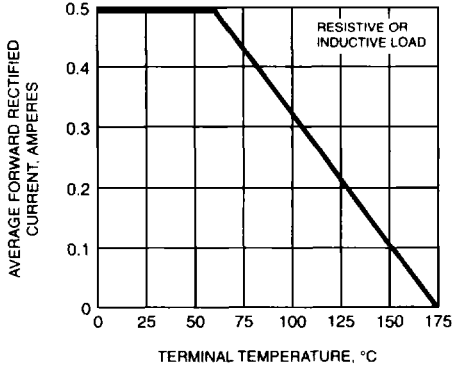
Fast switching device: 1st band is Red	SYMBOLS	RGL34A	RGL34B	RGL34D	RGL34G	RGL34J	UNITS
Polarity color bands (2nd Band)		Gray	Red	Orange	Yellow	Green	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	Volts
Maximum average forward rectified current at T <sub>T</sub> =55°C	I <sub>(AV)</sub>	0.5					Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	10.0					Amps
Maximum instantaneous forward voltage at 0.5A	V <sub>F</sub>	1.3					Volts
Maximum DC reverse current at rated DC blocking voltage T <sub>A</sub> =25°C T <sub>A</sub> =125°C	I <sub>R</sub>	5.0 50.0					μA
Maximum full load reverse current, full cycle average T <sub>A</sub> =55°C	I <sub>R(AV)</sub>	30.0					μA
Maximum reverse recovery time (NOTE 1)	t <sub>rr</sub>	150				250	ns
Typical junction capacitance (NOTE 2)	C <sub>J</sub>	4.0					pF
Maximum thermal resistance (NOTE 3) (NOTE 4)	R <sub>θJA</sub> R <sub>θJT</sub>	150.0 70.0					°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +175					°C

### NOTES:

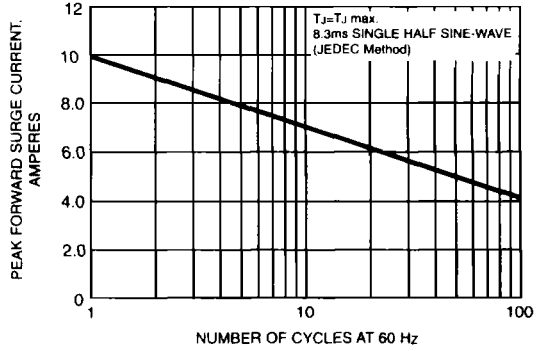
- (1) Reverse recovery test conditions I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (3) Thermal resistance from junction to ambient, 0.2 x 0.2" (5.0 x 5.0mm) copper pads to each terminal
- (4) Thermal resistance from junction to terminal, 0.2 x 0.2" (5.0 x 5.0mm) copper pads to each terminal

# RATINGS AND CHARACTERISTIC CURVES RGL34A THRU RGL34J

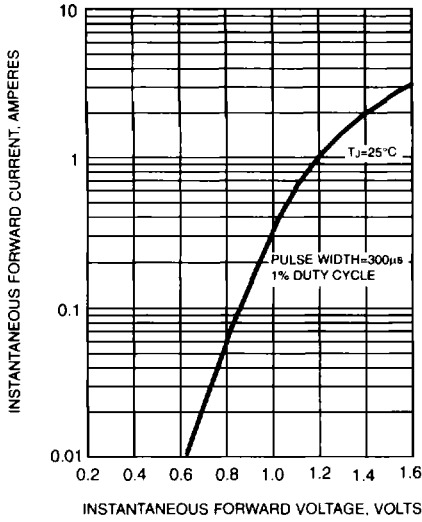
**FIG. 1 - FORWARD CURRENT DERATING CURVE**



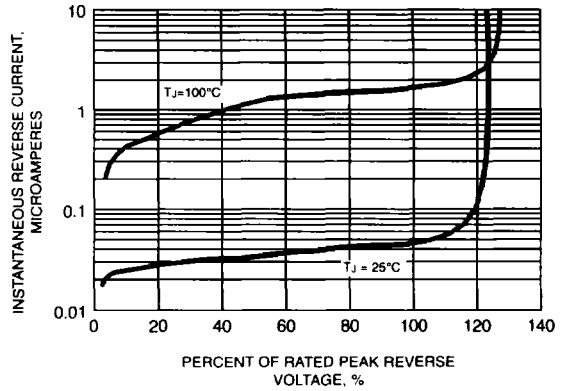
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



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



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**

