

RGL34A THRU RGL34J

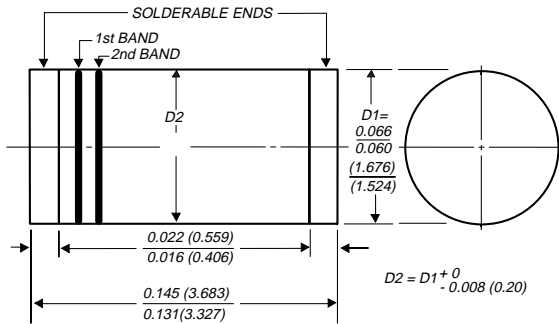
SURFACE MOUNT GLASS PASSIVATED JUNCTION FAST SWITCHING RECTIFIER

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

SUPERRECTIFIER®

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 DO-213AA 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 _{RRM}	50	100	200	400	600	Volts	
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	Volts	
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	Volts	
Maximum average forward rectified current at T _T =55°C	I _(AV)	0.5						Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	10.0						Amps
Maximum instantaneous forward voltage at 0.5A	V _F	1.3						Volts
Maximum DC reverse current at rated DC blocking voltage	I _R	5.0 50.0						μA
Maximum full load reverse current, full cycle average T _A =55°C	I _{R(AV)}	30.0						μA
Maximum reverse recovery time (NOTE 1)	t _{rr}	150					250	ns
Typical junction capacitance (NOTE 2)	C _J	4.0						pF
Maximum thermal resistance (NOTE 3) (NOTE 4)	R _{θJA} R _{θJT}	150.0 70.0						°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +175						°C

NOTES:

- (1) Reverse recovery test conditions I_F=0.5A, I_R=1.0A, I_{rr}=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

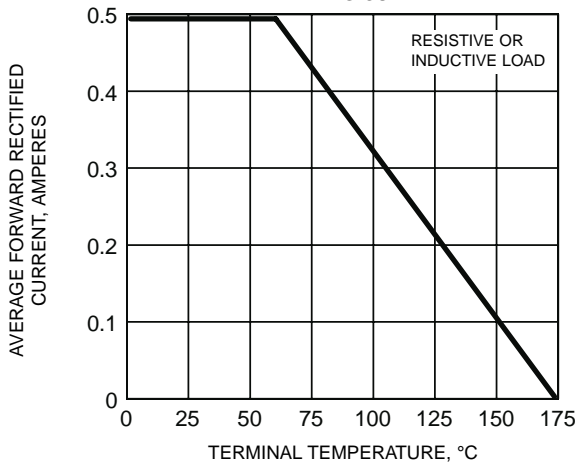


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

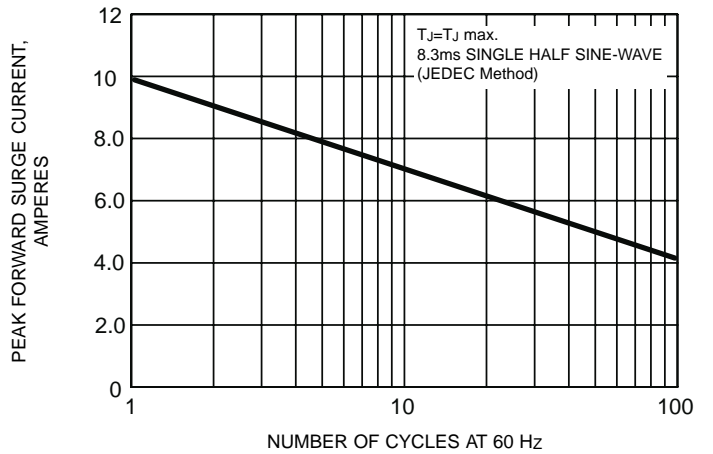


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

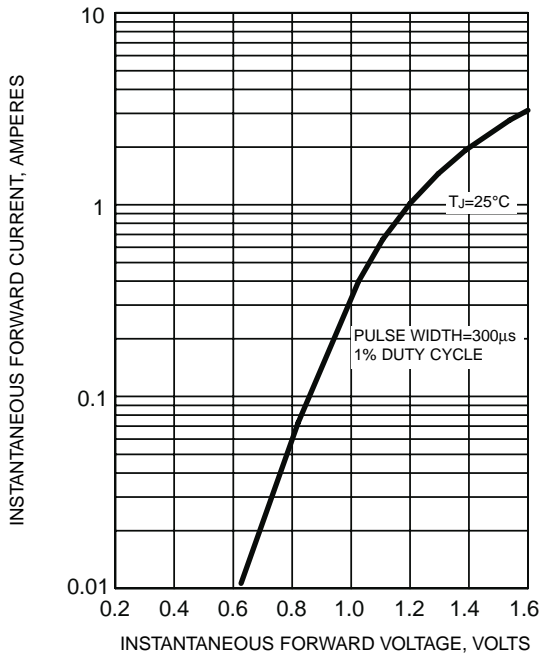


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

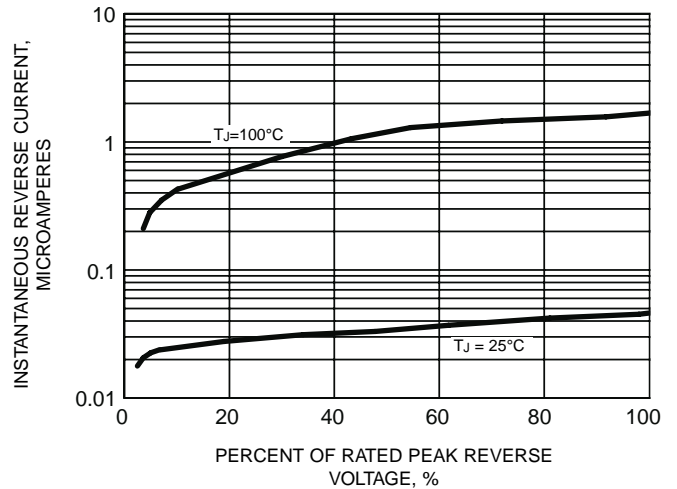


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

