

# RGL41A THRU RGL41M

## SINTERED GLASS JUNCTION FAST SWITCHING SURFACE MOUNTED RECTIFIER

VOLTAGE:50 TO 1000V

CURRENT: 1.0A



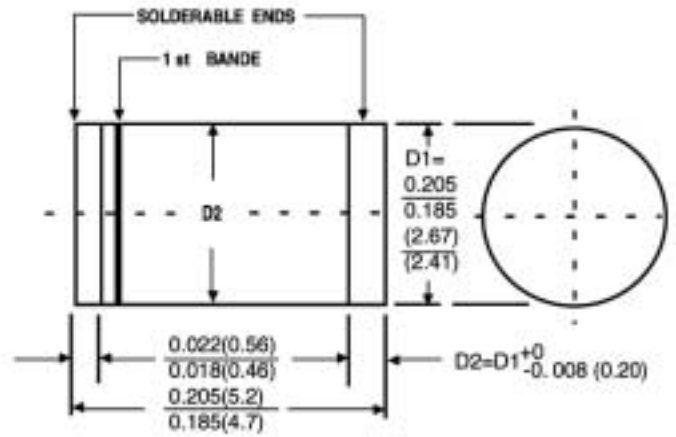
### FEATURE

High temperature metallurgic ally bonded construction  
 Sintered glass cavity-free junction  
 Case over-molded with UL-94 class V-0 flame Retardant epoxy  
 Capability of meeting environmental standard of MIL-S-19500  
 High temperature soldering guaranteed 450°C /5sec/at terminal  
 Operate at Ta =55°C with no thermal run away  
 Typical Ir<0.1uA

### MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C  
 Polarity: Two bands indicates cathode (1st band denotes device type and 2nd band denotes voltage type)  
 Mounting position: any

### MELF



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

Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

	SYMBOL	RGL 41A	RGL 41B	RGL 41D	RGL 41G	RGL 41J	RGL 41K	RGL 41M	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>rms</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V <sub>dc</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	f(av)	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	30.0							A
Maximum Instantaneous Forward Voltage at 1.0A	V <sub>f</sub>	1.3							V
Maximum full load reverse current full cycle average at Ta =75°C	I <sub>r(av)</sub>	30.0							μA
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I <sub>r</sub>	5.0 50.0							μA μA
Maximum Reverse Recovery Time (Note1 )	T <sub>rr</sub>	150			250	500		nS	
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	15.0							pF
Typical Thermal Resistance (Note 3)	R(ja)	75.0							°C/W
Storage and Operating Junction Temperature	T <sub>stg</sub> , T <sub>j</sub>	-65 to +175							°C
Polarity Color Band (2nd Band)		Gray	Red	Orange	Yellow	Green	Blue	Violet	

Note:

- Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
- Measured at 1.0 MHZ and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to Ambient at 6.0mm<sup>2</sup> copper pad to each terminal

RATINGS AND CHARACTERISTIC CURVES RGL41A THRU RGL41M

FIG. 1 - FORWARD CURRENT DERATING CURVE

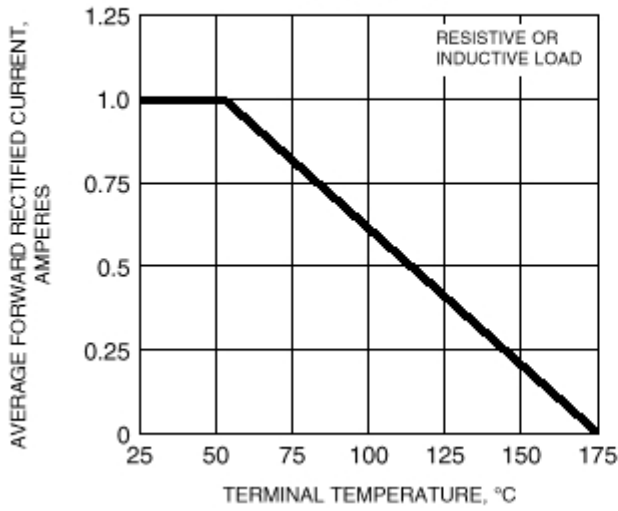


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

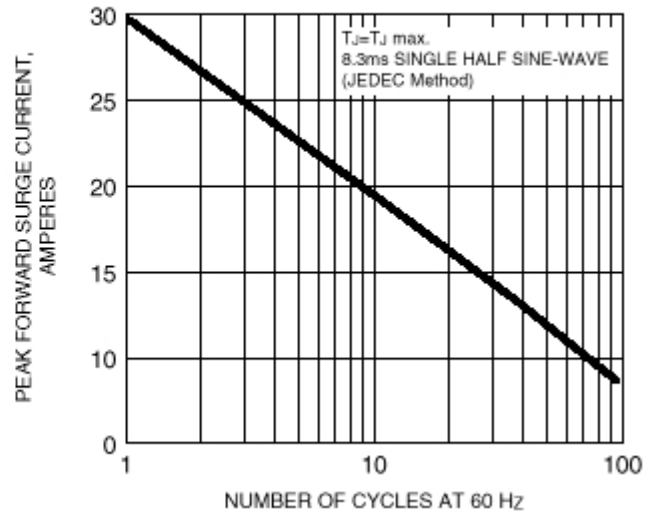


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

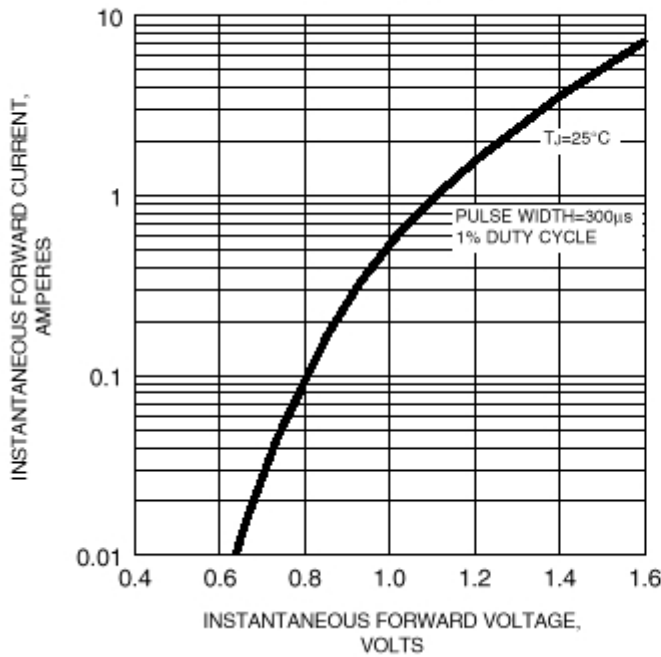


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

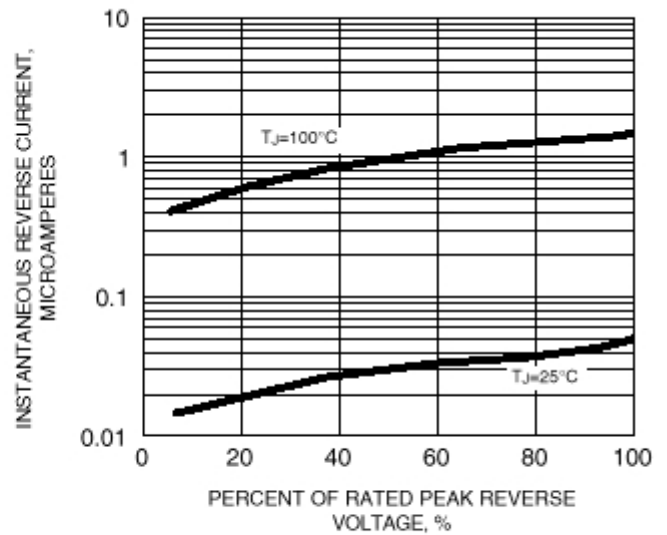


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

