



Glass Passivated Junction Rectifiers  
Reverse Voltage 50V to 1000V Forward Current 2.0 Amperes

# RL201G thru RL207G



### Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- The plastic material carries UL recognition 94V-0

### Mechanical Characteristics:

- Case: JEDEC DO-204AC(DO-15) molded plastic
- Terminals: Tin plated axial leads, solderable per MIL-STD-202E, method 208C
- Polarity: Color band denotes cathode
- Mounting position: Any
- High temperature soldering guaranteed : 250°C/10seconds, 0.375”(9.5mm) lead length at 5 lbs(2.3kg) tension
- Weight : 0.014oz., 0.39grams

### Maximum Ratings and Electrical Characteristics

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

Parameter	Symbol	Type							Units
		RL201G	RL202G	RL203G	RL204G	RL205G	RL206G	RL207G	
Maximum Repetitive 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 instantaneous forward voltage I <sub>F</sub> =2A	V <sub>F</sub>	1.1							V
Maximum average forward rectified current, 0.375”(9.5mm) lead length at T <sub>A</sub> =60°C	I <sub>F(AV)</sub>	2							A
Peak forward surge current @8.3ms single half sine wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	55							A
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>	5							µA
		100							
Typical junction capacitance (Note 1)	C <sub>J</sub>	30							pF
Typical Thermal Resistance	R <sub>θJA</sub>	40							°C/W
Storage temperature range	T <sub>stg</sub>	-55 ~ +150							°C
Operating junction temperature range	T <sub>J</sub>	-55 ~ +150							°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0VDC

## Ratings and Characteristic Curves

FIG.1- TYPICAL FORWARD CHARACTERISTICS

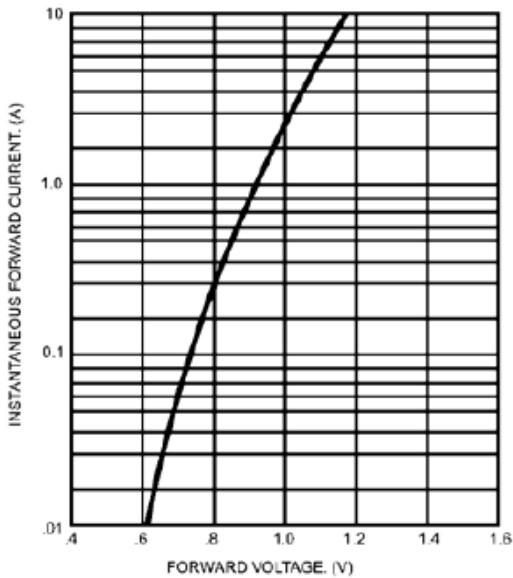


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

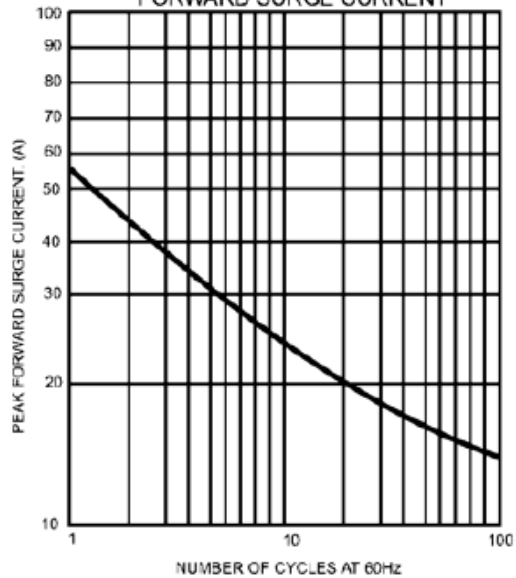


FIG.3- MAXIMUM FORWARD CURRENT DERATING CURVE

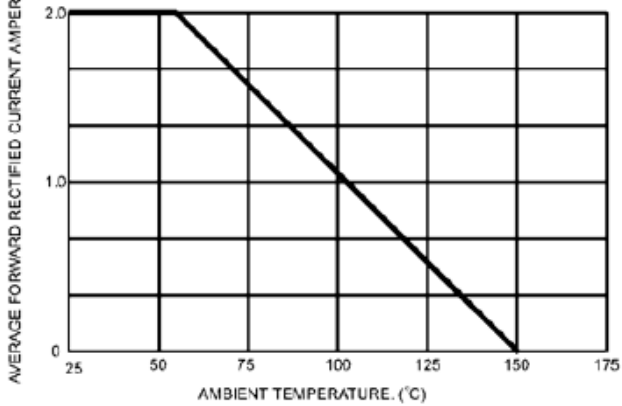
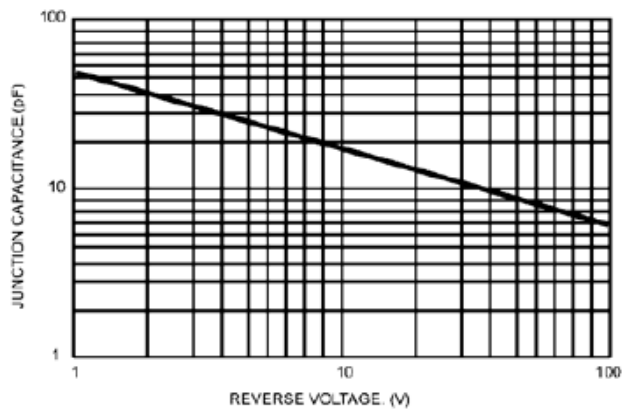
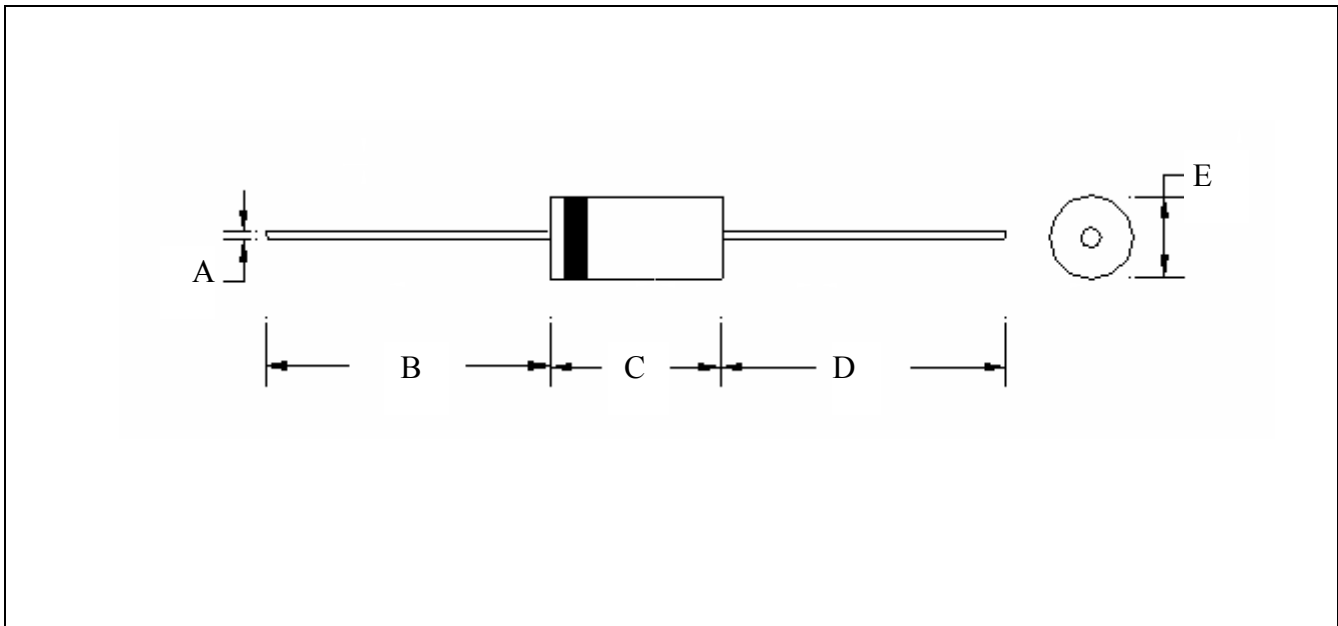


FIG.4- TYPICAL JUNCTION CAPACITANCE



**DO-204AC(DO-15) Dimension**



\*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	φ0.028	φ0.034	φ0.70	φ0.90	D	1.000	-	25.40	-
B	1.000	-	25.40	-	E	φ0.104	φ0.140	φ2.60	φ3.60
C	0.2300	0.3000	5.80	7.60					

Notes : 1.Controlling dimension : millimeters.  
 2.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.  
 3.If there is any question with packing specification or packing method, please contact your local CYStek sales office.

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