

# GR301G THRU GR307G

## GLASS PASSIVATED RECTIFIERS

### FEATURES:

- High temperature bonded construction
- High surge current capability
- No thermal runaway at 1 Amp. Current  $T_a=75^\circ\text{C}$
- High temperature soldering guaranteed :  $250^\circ\text{C}/10$  seconds, 0.375" lead length, 5lbs.(2.3kg) tension

### MECHANICAL DATA

Case : Molded plastic use UL 94V-0 recognized flame retardant epoxy

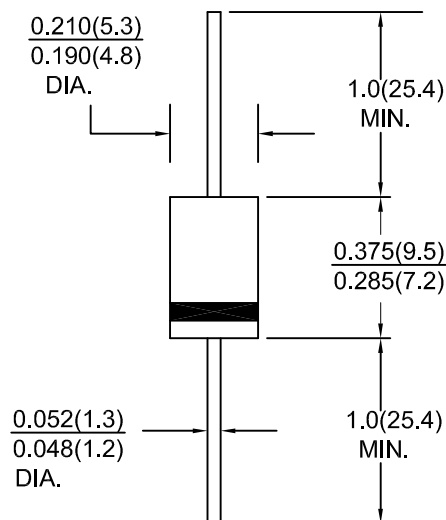
Terminals : Axial leads, solderable per MIL-STD-202, Method 208 guaranteed

Polarity : Color band on body denotes cathode end

Mounting Position : Any

Weight : 1.2 grams, 0.045 ounce

### DO-201AD



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at  $25^\circ\text{C}$  ambient temp. unless otherwise specified.

Single phase, half sine wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20 %.

Characteristic	Symbol	GR 301G	GR 302G	GR 303G	GR 304G	GR 305G	GR 306G	GR 307G	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current .375" lead length at $T_a=75^\circ\text{C}$	$I_O$	3.0							Amps
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	$I_{FSM}$	125.0							Amps
Maximum instantaneous forward voltage drop at 3.0 A	$V_F$	1.1		1.0				Volts	
Maximum DC reverse current $T_a=25^\circ\text{C}$ at rated DC blocking voltage $T_a=150^\circ\text{C}$	$I_R$					5.0 100.0		$\mu\text{A}$	
Maximum full load reverse current, full cycle average 0.375" lead length at $T_a=55^\circ\text{C}$	$I_{R(AV)}$					100.0		$\mu\text{A}$	
Typical thermal resistance	$R_{th-JA}$ $R_{th-JL}$					20 10		$^\circ\text{C/W}$	
Typical junction capacitance	$C_j$					15.0		pF	
Operating junction and storage temperature range	$T_j, T_{stg}$					-65 to +150		$^\circ\text{C}$	

# RATINGS AND CHARACTERISTIC CURVES GR301G THRU GR307G

