

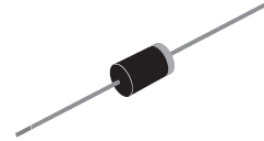


FAST RECOVERY GLASS PASSIVATED RECTIFIER FR301G ~ FR307G

Fast Recovery Glass Passivated Rectifier

Features

- Fast switching speed for high efficiency
- Glass passivated chip junction
- Low reverse leakage
- High forward surge current capacity
- High temperature soldering guaranteed: 260°C/10 seconds, 0.375" (9.5mm) lead length
- RoHS and REACH Compliance



DO201A
D



RoHS
COMPLIANT

Mechanical Data

Case:	Transfer molded plastic, DO-201AD(DO-27)
Polarity:	Color band denotes cathode end
Epoxy:	UL94V-0 rate flame retardant
Lead:	Plated axial lead, solderable per MIL-STD-202E method 208C
Mounting position:	Any
Weight:	0.04 ounce, 1.12 gram

Maximum Ratings ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

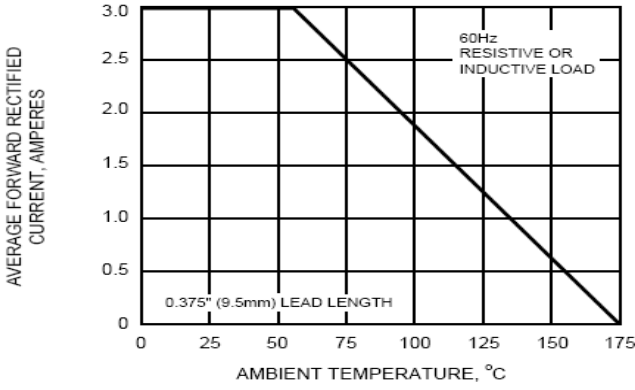
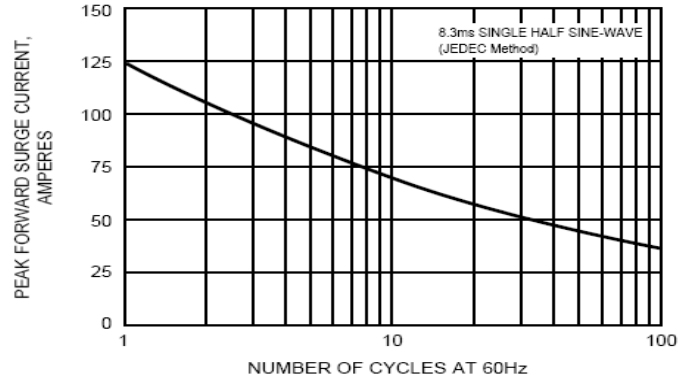
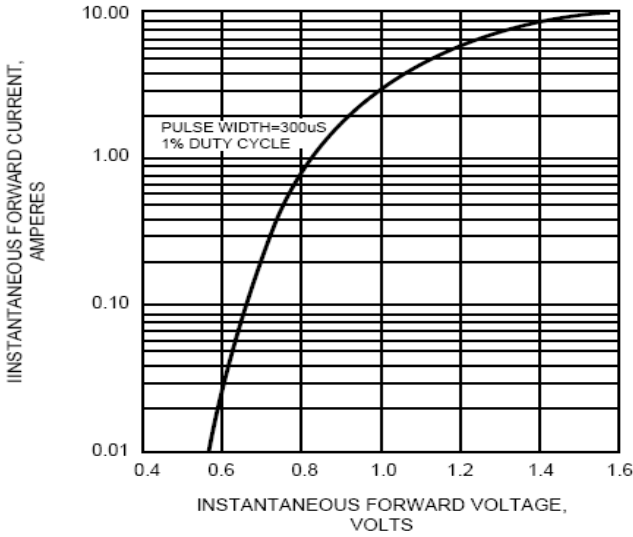
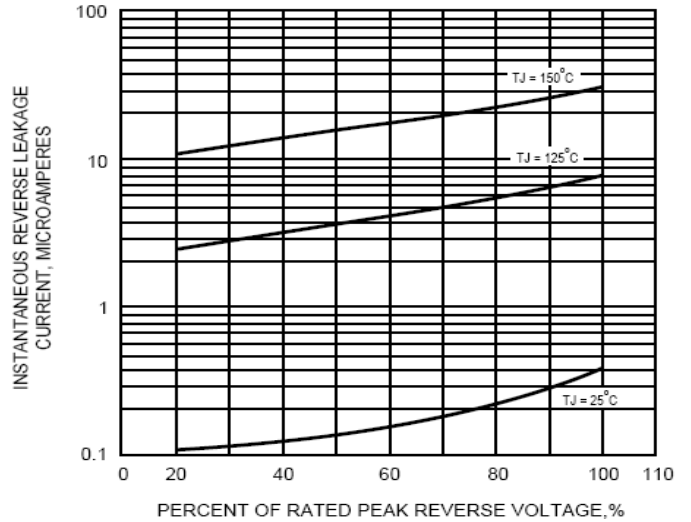
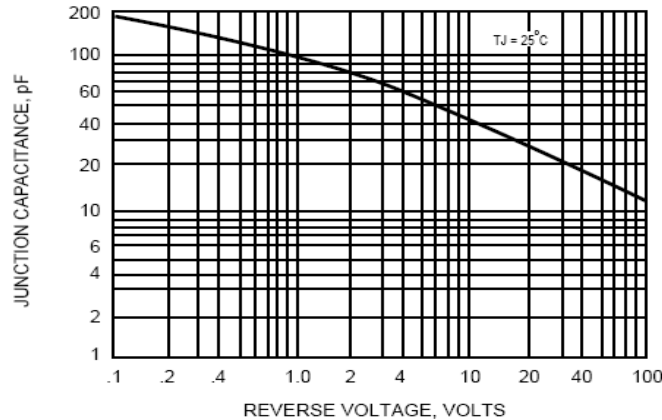
Symbol	Description	FR301G	FR302G	FR303G	FR304G	FR305G	FR306G	FR307G	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
VRMS	Max RMS Voltage	35	70	140	280	420	560	700	V	
VDC	Max DC Blocking Voltage	50	100	200	400	600	800	1000	V	
I(AV)	Max Average Forward Rectified Current	3.0							A	
IFSM	Peak Forward Surge Current	125							A	
TJ,TSTG	Operating and Storage Temperature Range	-65 to +175							°C	
Rθ-JA	Typical Thermal Resistance	20							°C/W	Note 2

Electrical Characteristics ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

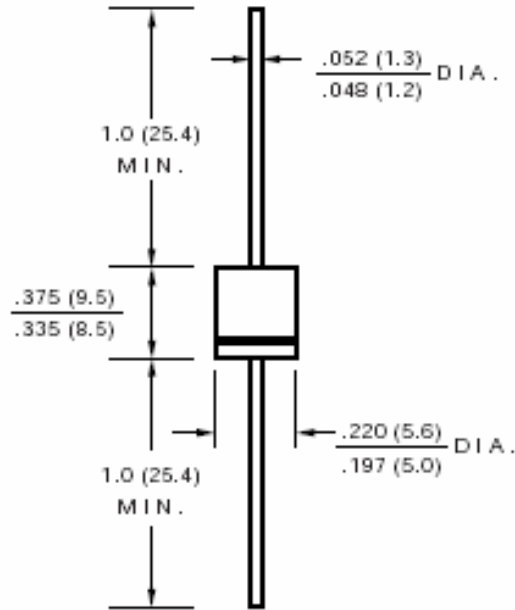
Symbol	Description	FR301G	FR302G	FR303G	FR304G	FR305G	FR306G	FR307G	Unit	Conditions
V _F	Max Instantaneous Forward Voltage	1.3							V	3.0A
I _R	Max DC Reverse Current at Rated DC Blocking Voltage	5.0							μA	T _A =25°C
		50								T _A =125°C
T _{RR}	Maximum reverse recovery time	150		250		500			nS	Note 1
C _J	Typical Junction Capacitance	60							pF	Note 3

Note:

1. Reverse recovery test conditions: I_F= 0.5A, I_R=1.0A, I_{RR} = 0.25A
2. Thermal resistance from junction to ambient with 0.375" (9.5mm) lead length, PCB mounted
3. Measured at 1.0MHz / 4.0V

FR301G ~ FR307G
Typical Characteristics Curves
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


Dimensions in inches (mm)



**DO201AD
(DO-27)**

Contact us:

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