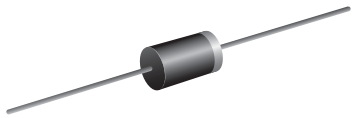
FR151G - FR157G

FAST RECOVERYGLASS PASSIVATED RECTIFIER DIODES

VOLTAGE RANGE: 50 - 1000V
CURRENT: 1.5 A



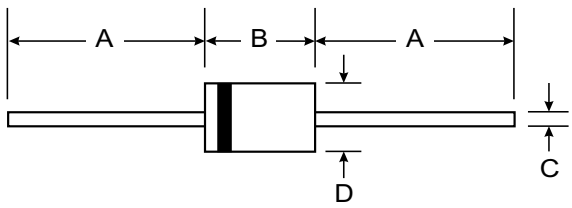
Features

- Glass passivated device
- Low Reverse Recovery Time (Trr)
- Low Reverse Current
- Low Forward Voltage Drop
- High Current Capability
- Plastic Material: UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: DO-15, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
  Polarity: Cathode Band
- Weight: 0.4 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

RoHS COMPLIANT



DO-15		
Dim	**Min**	**Max**
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	FR151G	FR152G	FR153G	FR154G	FR155G	FR156G	FR157G	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 9.5mm Lead Length @ T_A = 75°C	$I_{(AV)}$	1.5							A
Peak Forward Surge Current 8.3ms Single half sine-wave Superimposed on Rated Load (JEDEC method)	I_{FM}	60							A
Maximum Instantaneous Forward Voltage @ 1.5A DC	V_F	1.3							V
Maximum DC Reverse Current at rated DC Blocking Voltage @ T_A = 25°C	I_R	5.0							μA
Maximum Full Load Reverse Current Full Cycle Average 9.5 mm lead length @ T_L = 55°C	I_R	100							μA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	150				250	500		nS
Typical Junction Capacitance (Note 2)	C_J	25							pF
Operating 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 1.0MHz applied reverse voltage of 4.0V.

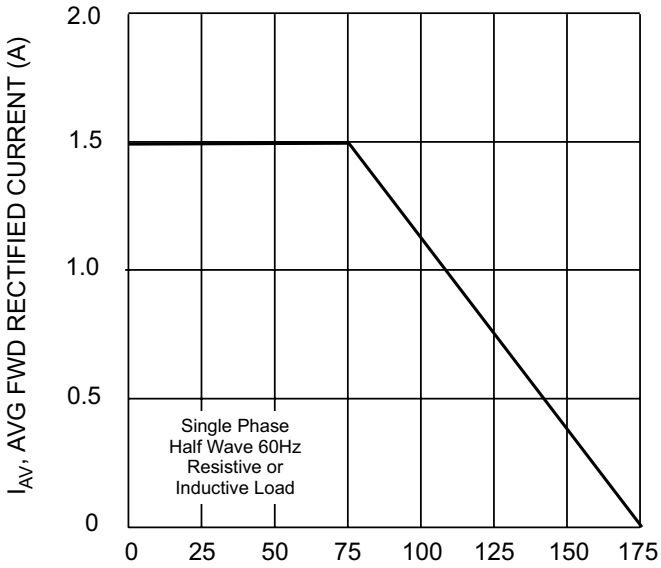


Fig.1 Forward Derating Curve

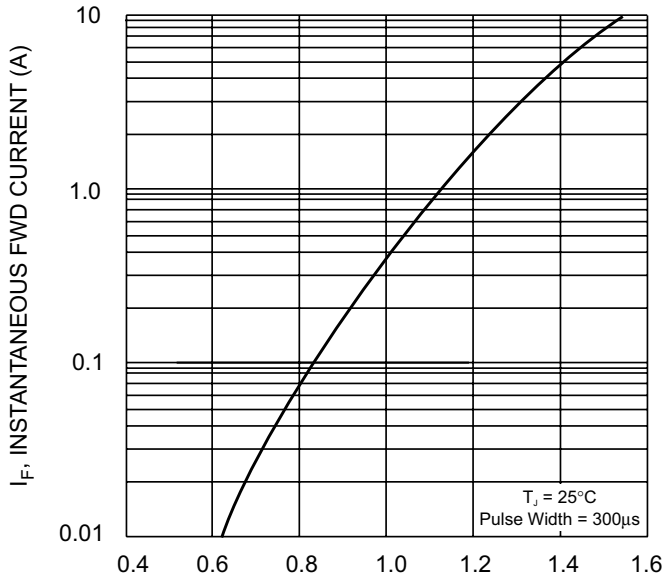


Fig. 2 Typical Forward Characteristics

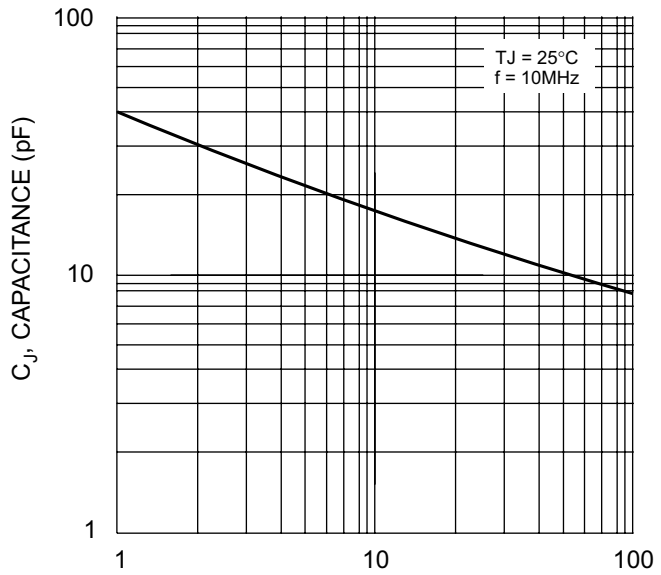


Fig. 3 Typical Junction Capacitance

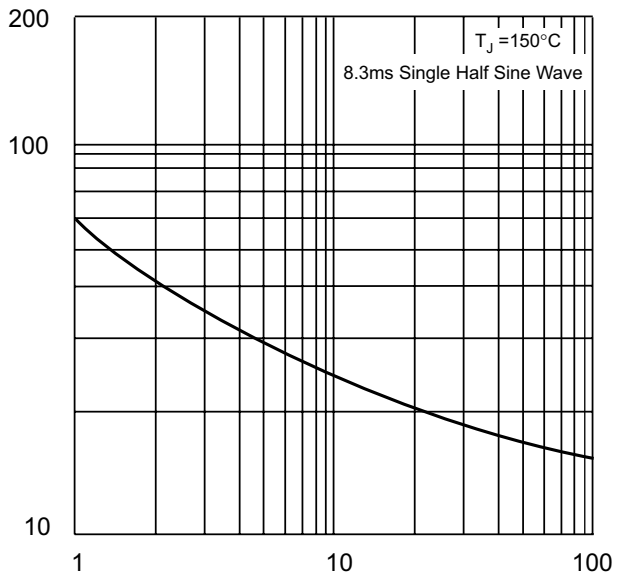


Fig. 4 Peak Forward Surge Current