

FR101G THRU FR107G

FAST RECOVERY GLASS PASSIVATED RECTIFIER

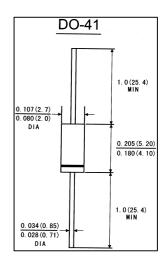
Reverse Voltage - 50 to 1000 Volts
Forward Current - 1.0Ampere

FEATURES

- . Fast switching
- . Low leakage
- . Low forward voltage drop, high efficiency
- . High current capability
- . Glass passivated junction
- . High reliability capability

MECHANICAL DATA

- . Case: JEDEC DO-41 molded plastic body
- . Terminals: Plated axial leads, solderable per MIL-STD-750, method 2026
- . Polarity: Color band denotes cathode end
- . Mounting Position: Any
- . Weight: 0.012 ounce, 0.33 gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	FR101G	FR102G	FR103G	FR104G	FR105G	FR106G	FR107G	Units	
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	Volts	
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	Volts	
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	100	Volts	
Macimum average forward rectified	I(AV)	1.0							Amp	
current 0.375"(9.5mm)lead length at Ta=55 $^{\circ}\mathrm{C}$	1(/(۷)									
Peak forward surge current 8.3ms single half										
sing-wave superimposed on rated load	IFSM		30.0							
(JEDEC method)										
Maximum instantaneous forward voltage at 1.0 A	VF	1.3							Volts	
Maximum DC Rreverse Current at rated DC		5.0								
blocking voltage										
Maximum full load reverse current full cycle	lR									
average. 0.375"(9.5mm)lead length at		100								
T∟=55°C										
Maximum reverse recovery time(Note 1)	Trr		1:	50		250	50	00	ns	
Typical junction Capacitance(Note 2)	Сл		15.0							
Operating and storage temperature range	ТЈ Тѕтс	-65 to +150							$^{\circ}$	

Notes: 1.Test conditions:IF=0.5A,IR=1.0A,Irr=0.25A.

2. Measured at 1MHz and applied reverse voltage of 4.0V Volts



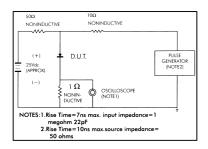
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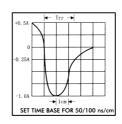
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RATINGS AND CHARACTERISTIC CURVES FR101G THRU FR107G

FIG.1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC





FLG.2-TYPICAL FORWARD CURRENT DERATING CURVE

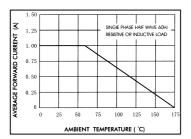


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

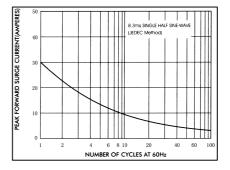


FIG.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

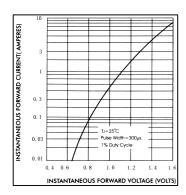


FIG.5-TYPICAL JUNCTION CAPACITANCE

