

# FR151 - FR157

## 1.5A FAST RECOVERY RECTIFIER

#### **Features**

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

#### **Mechanical Data**

Case: Molded Plastic

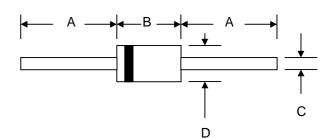
Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208
Polarity: Cathode Band

• Weight: 0.40 grams (approx.)

Mounting Position: Any

Marking: Type Number



DO-15					
Dim	Min	Max			
Α	25.4	_			
В	5.50	7.62			
С	0.71	0.864			
D	2.60	3.60			
All Dimensions in mm					

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

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

Characteristic	Symbol	FR151	FR152	FR153	FR154	FR155	FR156	FR157	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @T <sub>A</sub> = 55°C	lo				1.5				А
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	İFSM	60			Α				
Forward Voltage $@I_F = 1.5A$	VFM	1.2				V			
Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 100^{\circ}C$	IRM	5.0 100				μΑ			
Reverse Recovery Time (Note 2)	trr		1	50		250	50	00	nS
Typical Junction Capacitance (Note 3)	Cj	30			pF				
Operating Temperature Range	Tj	-65 to +125			°C				
Storage Temperature Range	Тѕтс	-65 to +150			°C				

#### \*Glass passivated forms are available upon request

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

- 2. Measured with IF = 0.5A, IR = 1.0A, IRR = 0.25A. See figure 5.
- 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

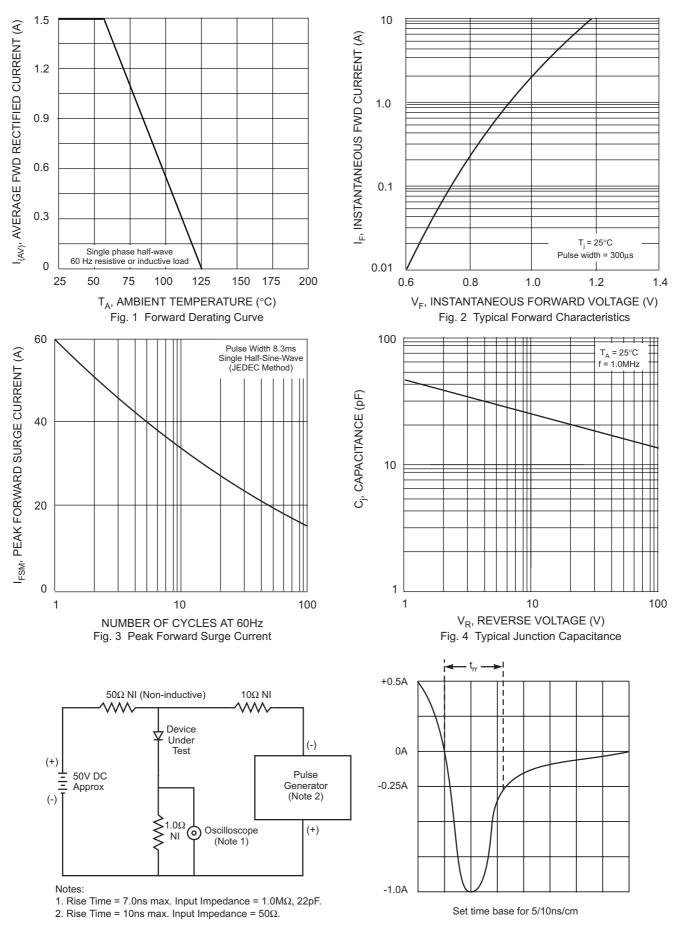


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

#### **ORDERING INFORMATION**

Product No.◆	Package Type	Shipping Quantity			
FR151-T3	DO-15	4000/Tape & Reel			
FR151-TB	DO-15	3000/Tape & Box			
FR151	DO-15	1000 Units/Box			
FR152-T3	DO-15	4000/Tape & Reel			
FR152-TB	DO-15	3000/Tape & Box			
FR152	DO-15	1000 Units/Box			
FR153-T3	DO-15	4000/Tape & Reel			
FR153-TB	DO-15	3000/Tape & Box			
FR153	DO-15	1000 Units/Box			
FR154-T3	DO-15	4000/Tape & Reel			
FR154-TB	DO-15	3000/Tape & Box			
FR154	DO-15	1000 Units/Box			
FR155-T3	DO-15	4000/Tape & Reel			
FR155-TB	DO-15	3000/Tape & Box			
FR155	DO-15	1000 Units/Box			
FR156-T3	DO-15	4000/Tape & Reel			
FR156-TB	DO-15	3000/Tape & Box			
FR156	DO-15	1000 Units/Box			
FR157-T3	DO-15	4000/Tape & Reel			
FR157-TB	DO-15	3000/Tape & Box			
FR157	DO-15	1000 Units/Box			

Products listed in **bold** are WTE **Preferred** devices.

T3 suffix refers to a 13" reel. TB suffix refers to Ammo Pack.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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