

# SF11 – SF17

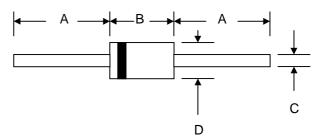
## **1.0A SUPER-FAST RECTIFIER**

#### 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: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-41					
Dim	Min	Max			
Α	25.4	—			
В	4.06	5.21			
С	0.71	0.864			
D	2.00	2.72			
All Dimensions in mm					

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

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

Characteristic	Symbol	SF11	SF12	SF13	SF14	SF15	SF16	SF17	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	50	100	150	200	300	400	600	V
RMS Reverse Voltage	VR(RMS)	35	70	105	140	210	280	420	V
Average Rectified Output Current (Note 1) $@T_A = 55^{\circ}$	c <sup>Io</sup>	1.0					А		
Non-Repetitive Peak Forward Surge Current 8.3 Single half sine-wave superimposed on rated loa (JEDEC Method)		30				A			
Forward Voltage @I <sub>F</sub> = 1.0	A Vfm	0.95 1.3			1.7	V			
Peak Reverse Current $@T_A = 25^\circ$ At Rated DC Blocking Voltage $@T_A = 100^\circ$	IDM	5.0 100					μA		
Reverse Recovery Time (Note 2)	trr	35			nS				
Typical Junction Capacitance (Note 3)	Cj		5	50			25		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.

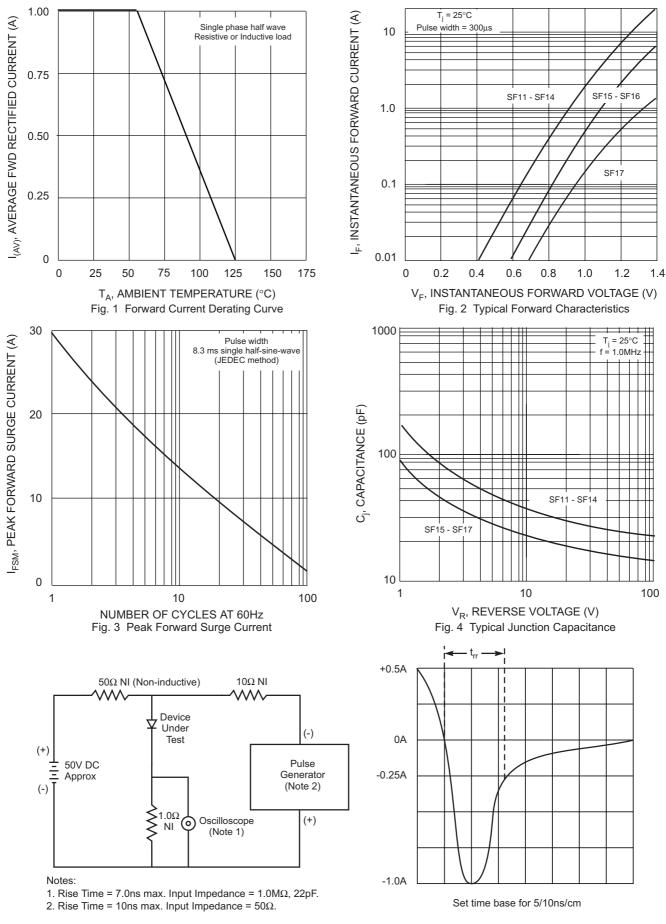


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

Product No.	Package Type	Shipping Quantity				
SF11-T3	DO-41	5000/Tape & Reel				
SF11-TB	DO-41	5000/Tape & Box				
SF11	DO-41	1000 Units/Box				
SF12-T3	DO-41	5000/Tape & Reel				
SF12-TB	DO-41	5000/Tape & Box				
SF12	DO-41	1000 Units/Box				
SF13-T3	DO-41	5000/Tape & Reel				
SF13-TB	DO-41	5000/Tape & Box				
SF13	DO-41	1000 Units/Box				
SF14-T3	DO-41	5000/Tape & Reel				
SF14-TB	DO-41	5000/Tape & Box				
SF14	DO-41	1000 Units/Box				
SF15-T3	DO-41	5000/Tape & Reel				
SF15-TB	DO-41	5000/Tape & Box				
SF15	DO-41	1000 Units/Box				
SF16-T3	DO-41	5000/Tape & Reel				
SF16-TB	DO-41	5000/Tape & Box				
SF16	DO-41	1000 Units/Box				
SF17-T3	DO-41	5000/Tape & Reel				
SF17-TB	DO-41	5000/Tape & Box				
SF17	DO-41	1000 Units/Box				

#### **ORDERING INFORMATION**

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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