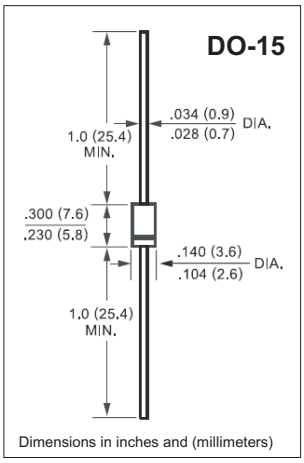
2.0A Super-fast Rectifier
SF21 - SF27



■ Features

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

■ Maximum Ratings and Electrical Characteristics Ta = 25℃

Parameter	Symbol	SF21	SF22	SF23	SF24	SF25	SF26	SF27	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	150	200	300	400	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	105	140	210	280	420	V
Average Rectified Output Current *1 @ T_A = 55℃	I_O	2							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
Forward Voltage Drop @ I_F = 2A	V_{FM}	0.95				1.3		1.7	V
Peak Reverse Leakage Current @ T_A = 25℃ at Rated DC Blocking Voltage @ T_A = 100℃	I_{RM}	5 100							μA
Reverse Recovery Time *2	t_{rr}	35							ns
Typical Junction Capacitance *3	C_j	60				30			pF
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150							℃

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

*2. Measured with I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A.

*3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

SF21 - SF27

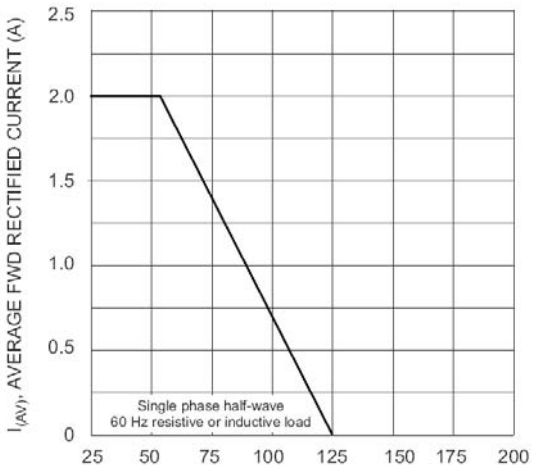


Fig. 1 Forward Current Derating Curve

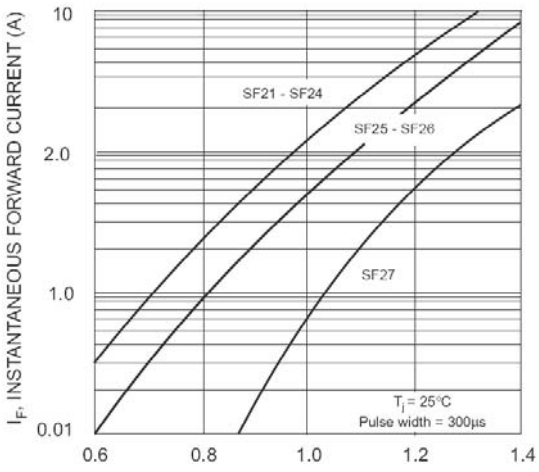


Fig. 2 Typical Forward Characteristics

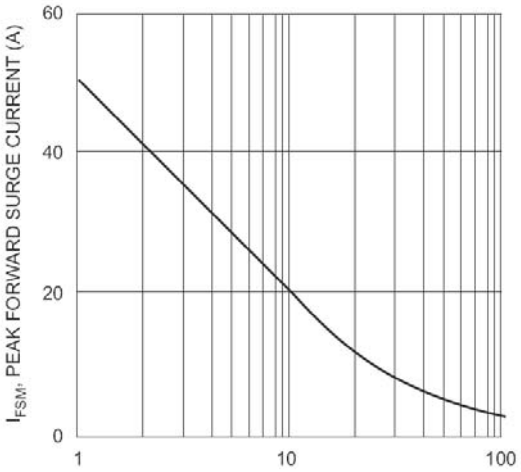


Fig. 3 Peak Forward Surge Current

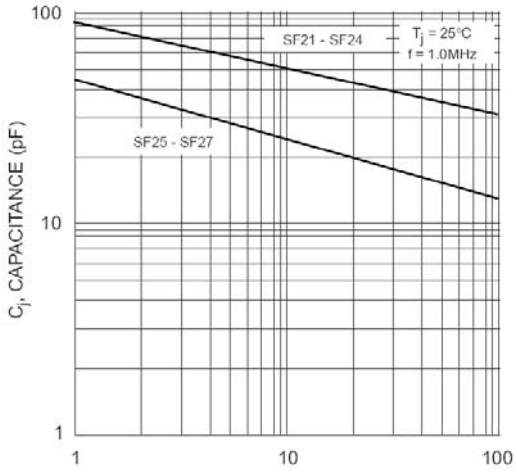
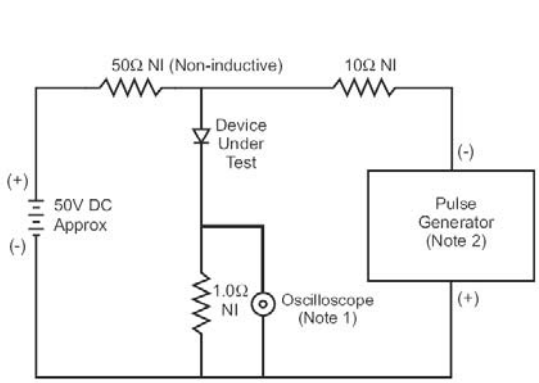


Fig. 4 Typical Junction Capacitance



Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
2. Rise Time = 10ns max. Input Impedance = 50Ω.

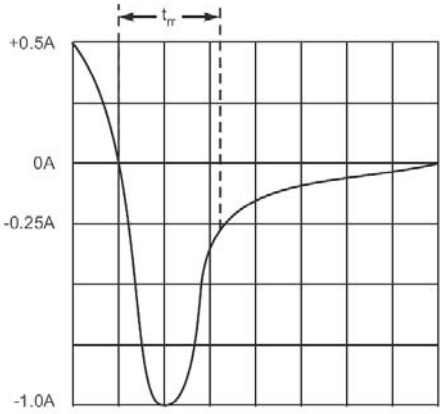


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit