

Features

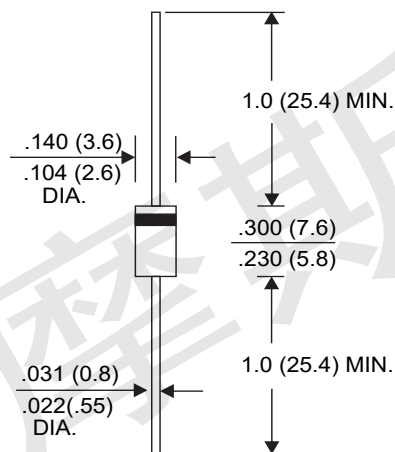
DO-15(DO-204AC)



- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

MECHANICAL DATA

- Case: Molded plastic DO-15
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS/Lead Free Version



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	SF21G	SF23G	SF24G	SF25G	SF26G	SF28G	SF29G	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RM}	50	150	200	300	400	600	800	V
Maximum RMS Voltage	V _{RMS}	35	105	140	210	280	420	560	V
Maximum DC Blocking Voltage	V _{DC}	50	150	200	300	400	600	800	V
Average Rectified Output Current (Note 1) @T _L =100 °C	I _{F(AV)}	2.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50							A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	10.375							A ² s
Forward Voltage @IF=2.0A	V _{FM}	0.95			1.25	1.25	1.7	1.85	V
Peak Reverse Current @T _A =25°C	I _R	5.0							uA
At Rated DC Blocking Voltage @T _A =125°C		100							
Maximum Reverse Recovery Time (Note2)	T _{RR}	35							nS
Typical Junction Capacitance (Note 3)	C _j	40				30			pF
Typical Thermal Resistance Junction to Ambient	R _{θJA}	25							°C/W
Operating Temperature Range	T _j	-55 to + 150							°C
Storage Temperature Range	T _{STG}	-55 to + 150							°C

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

2. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $IRR=0.25\text{A}$

3. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

RATINGS AND CHARACTERISTIC CURVES

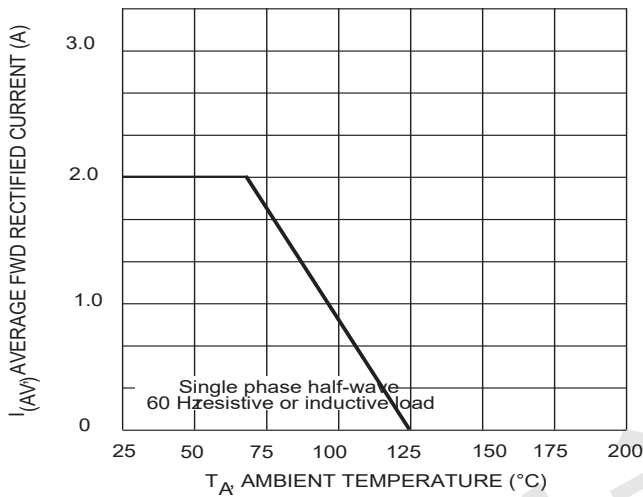


Fig. 1 Forward Derating Curve

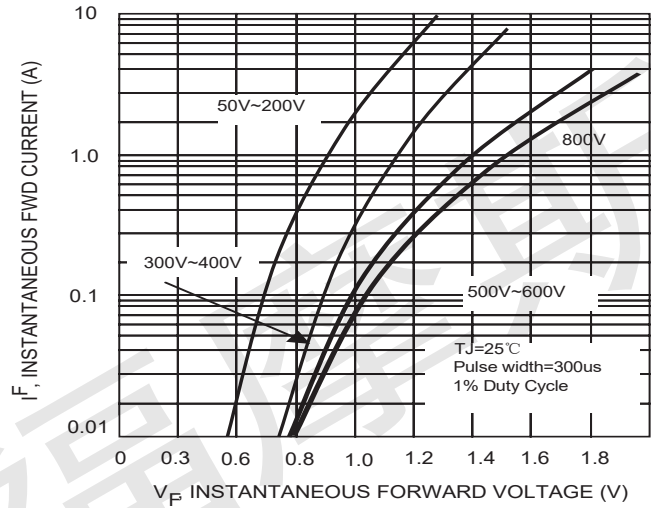


Fig. 2 Typical Forward Characteristics

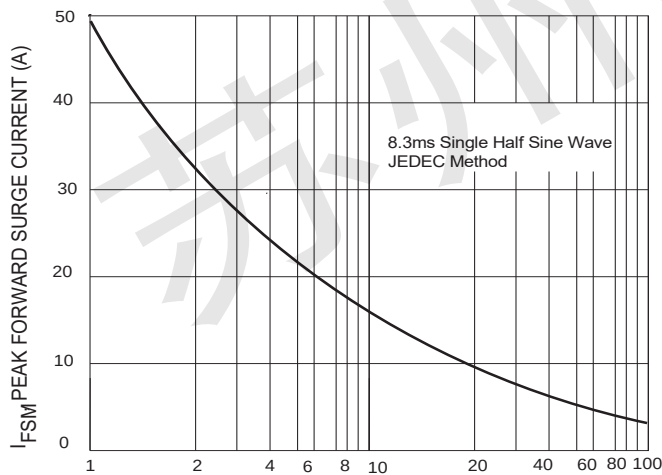


Fig. 3 Peak Forward Surge Current

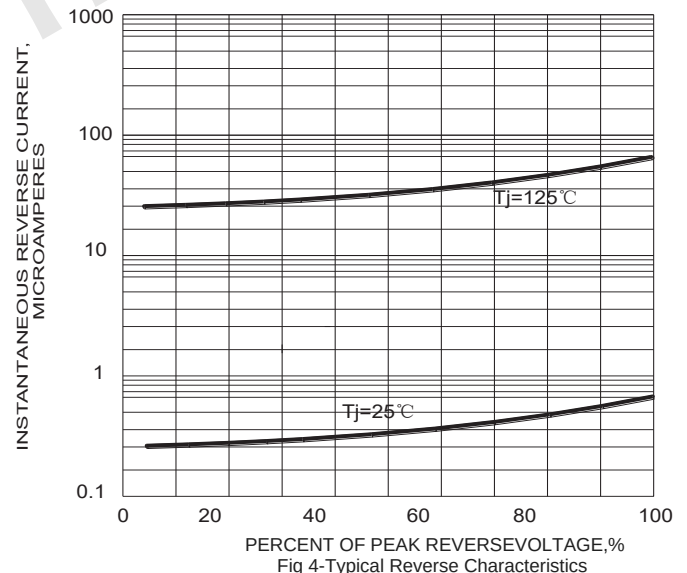
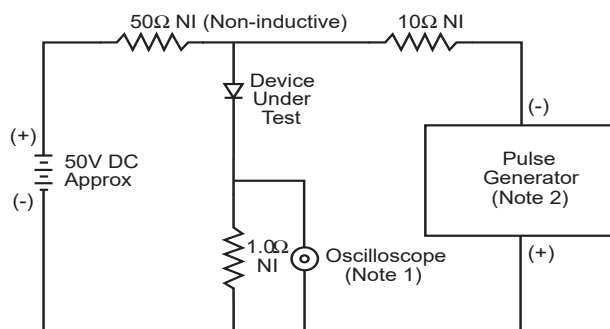


Fig. 4-Typical Reverse Characteristics



Notes:

1. Rise Time = 7ns max. Input Impedance = 1MΩ 22pF
2. Rise Time = 10ns max. Source Impedance = 50Ω

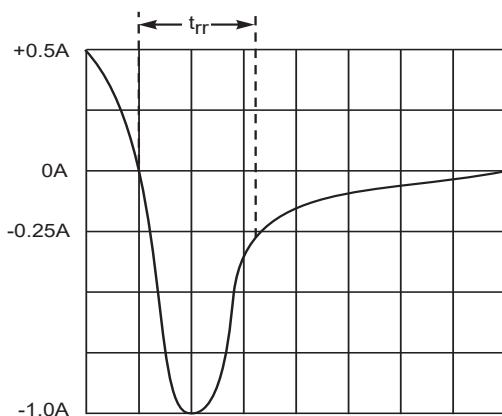


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit