

## Features

- Low reverse leakage
- High forward surge capability
- High reliability
- Ultrafast recovery time for high efficiency
- High temperature soldering guaranteed: 260°C/10seconds, 9.5mm lead length
- Lead and body according with RoHS standard

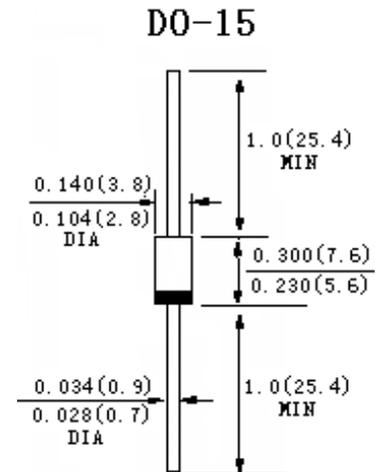
## Mechanical Data

**Case:** DO-15 Molded plastic

**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

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

For capacitive load, derate current by 20%

TYPE NUMBER	Symbol	SF21	SF22	SF24	SF26	SF27	SF28	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	500	600	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	350	420	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	500	600	V
Maximum average forward rectified current 9.5mm lead length at $T_A=55^\circ\text{C}$	$I_{F(AV)}$	2.0						A
Peak Forward Surge Current, 8.3ms single half-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	60						A
Maximum instantaneous forward voltage at 2.0A	$V_F$	0.95		1.25	1.7		V	
Maximum reverse recovery time (Note: 1)	$T_{rr}$	35						nS
Maximum DC reverse current at rated DC blocking voltage	$T_a=25^\circ\text{C}$	$I_{R1}$						$\mu\text{A}$
	$T_a=100^\circ\text{C}$	$I_{R2}$						$\mu\text{A}$
Operating junction temperature range	$T_J$	-55to+150						$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-55to+150						$^\circ\text{C}$

**Note:** 1. Reverse Recovery Test Conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $IRR=0.25\text{A}$ .

Characteristic Curves

Fig. 1 – Forward Current Derating Curve

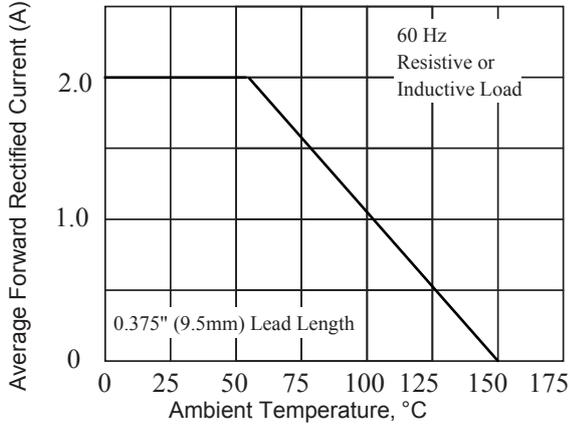


Fig. 2 – Maximum Non-repetitive Peak Forward Surge Current

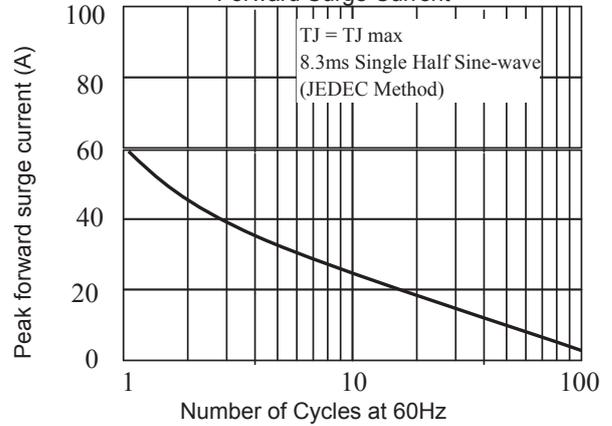


Fig 3. – Typical Instantaneous Forward Characteristics

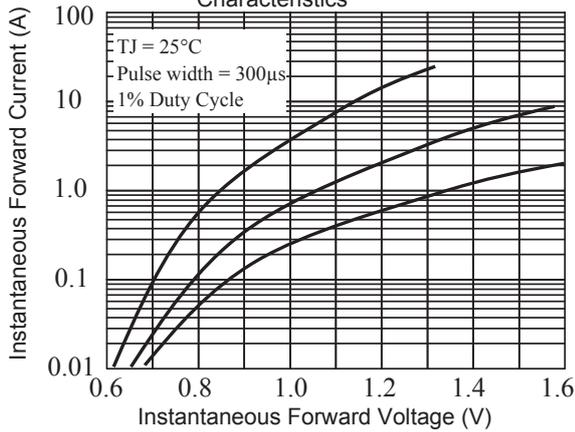


Fig 4. – Typical Reverse Characteristics

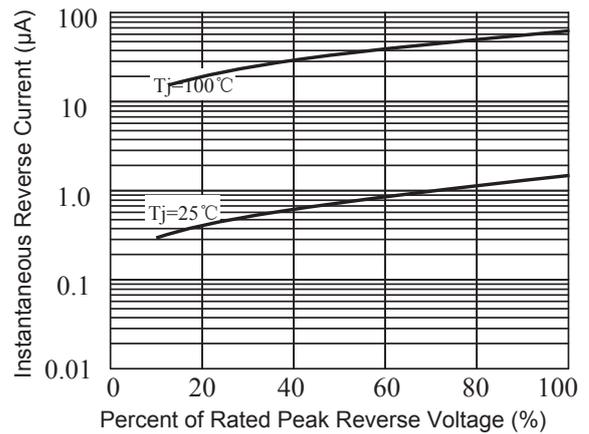


Fig 5. –typical Junction Capacitance

