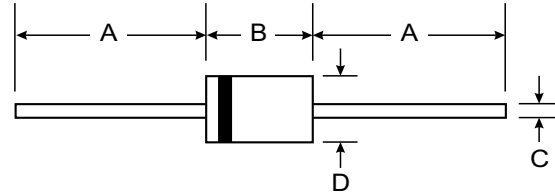


### Features

- Low Leakage
- Low Forward Voltage Drop
- High Current Capability
- Super-fast Switching Speed < 35ns
- Plastic Material: UL Flammability Classification Rating 94V-0



### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Axial Leads, Solderable per MIL-STD-202 Method 208
- Polarity: Color Band Denotes Cathode
- Approx. Weight: 0.3 grams
- Mounting Position: Any

DO-41		
Dim	Min	Max
A	25.4	—
B	4.1	5.2
C	0.71	0.86
D	2.0	2.7
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.

Characteristic	Symbol	SF11	SF12	SF13	SF14	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	150	200	V
Maximum RMS Voltage	$V_{RMS}$	35	70	105	140	V
Maximum DC Blocking voltage	$V_{DC}$	50	100	150	200	V
Maximum Average Forward Rectified Current .375" 9.5mm Lead Length @ $T_A=55^\circ\text{C}$	$I_{(AV)}$	1.0				A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FM}$	30				A
Maximum Instantaneous Forward Voltage at 1.0A DC	$V_f$	0.975				V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5.0				$\mu\text{A}$
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_A = 150^\circ\text{C}$	$I_R$	50				$\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	35				ns
Typical Junction Capacitance (Note 2)	$C_J$	63				pF
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to + 175				$^\circ\text{C}$

Notes: 1. Reverse Recovery Test Conditions:  $I_F=0.5\text{ A}$ ,  $I_R=1.0\text{ A}$ ,  $I_{RR}=0.25\text{ A}$   
2. Measured at 1.0MHz and applied reverse voltage of 4.0V.

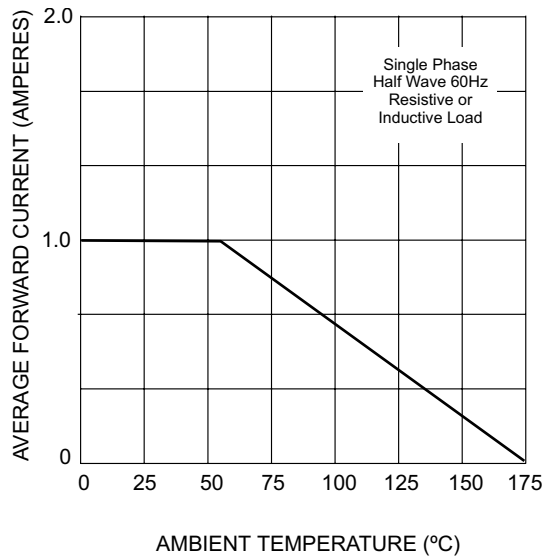


Fig. 1 Typical Forward Current Derating Curve

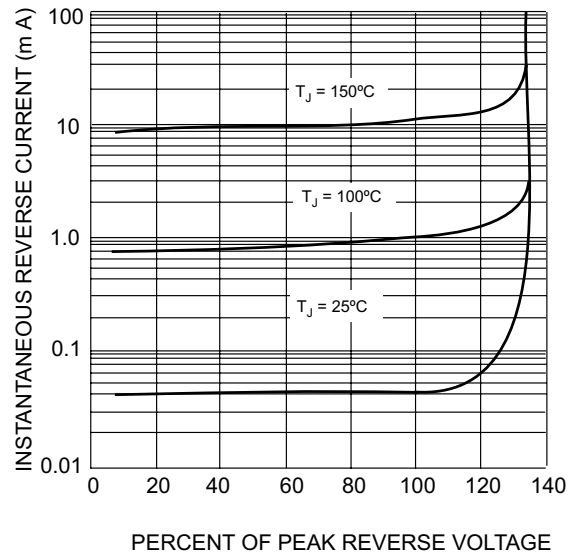


Fig. 2 Typical Reverse Characteristics

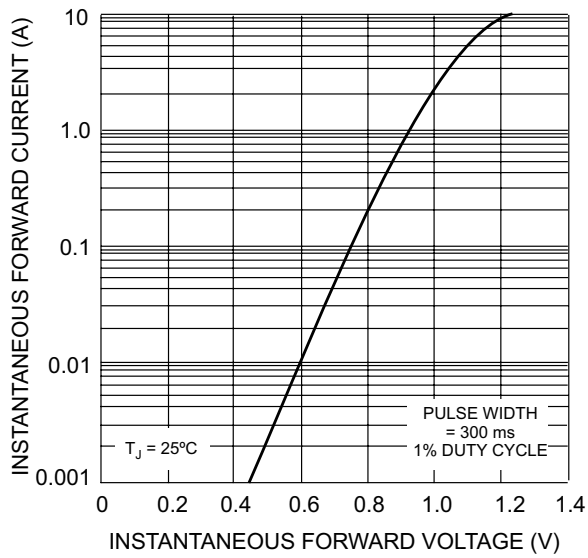


Fig. 3 Typ. Instantaneous Fwd Characteristics

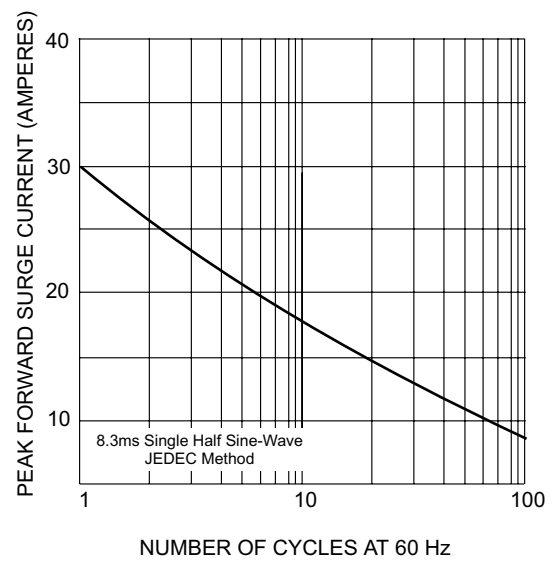


Fig. 4 Max Non-Repetitive Peak Fwd Surge Current (A)

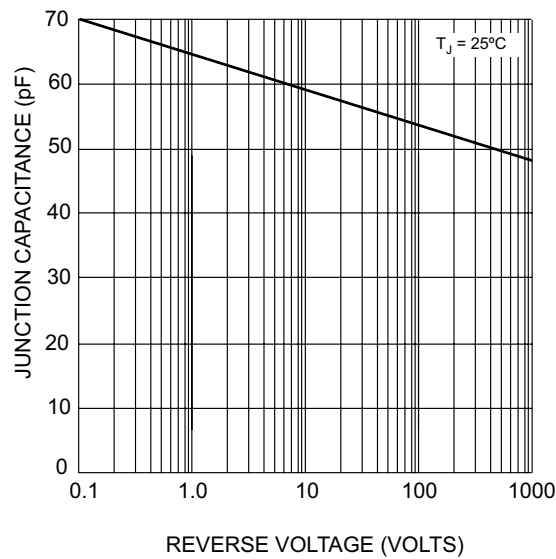


Fig. 5 Typical Junction Capacitance