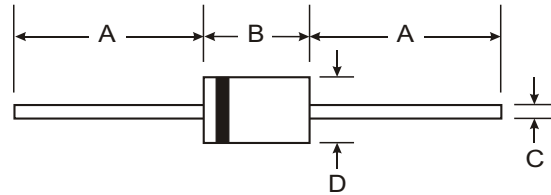


### Features

- Glass Passivated Die Construction
- Diffused Junction
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 50A Peak
- Low Reverse Leakage Current
- Plastic Material - UL Flammability Classification 94V-0



### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.4 grams (approx)
- Marking: Type Number

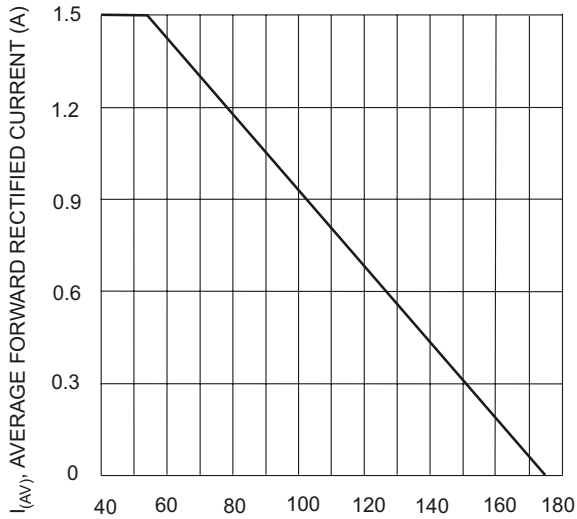
DO-15		
Dim	Min	Max
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.6
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

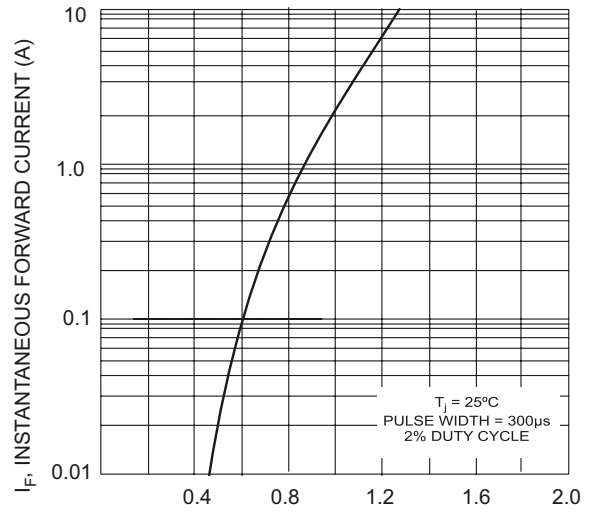
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	1N53 91G	1N53 92G	1N53 93G	1N53 95G	1N53 97G	1N53 98G	1N53 99G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_A = 55^\circ\text{C}$	$I_O$	1.5							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 @ $I_F = 1.5\text{A}$	$V_{FM}$	1.1							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_{RM}$	5.0 200							$\mu\text{A}$
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	10.4							$\text{A}^2\text{s}$
Typical Junction Capacitance (Note 2)	$C_j$	15							pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	80							K/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +175							$^\circ\text{C}$

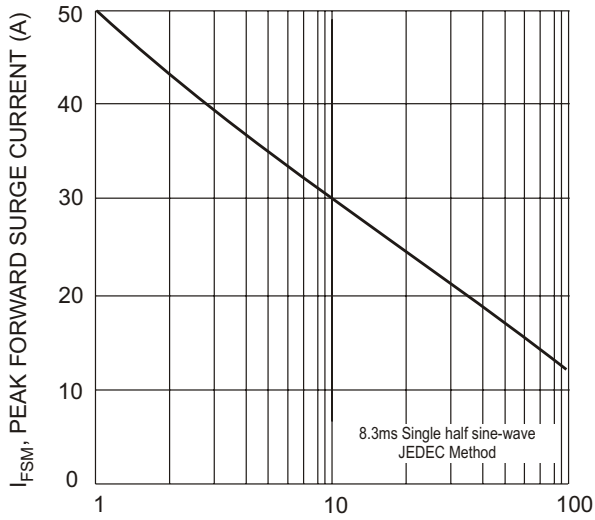
- Notes: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.



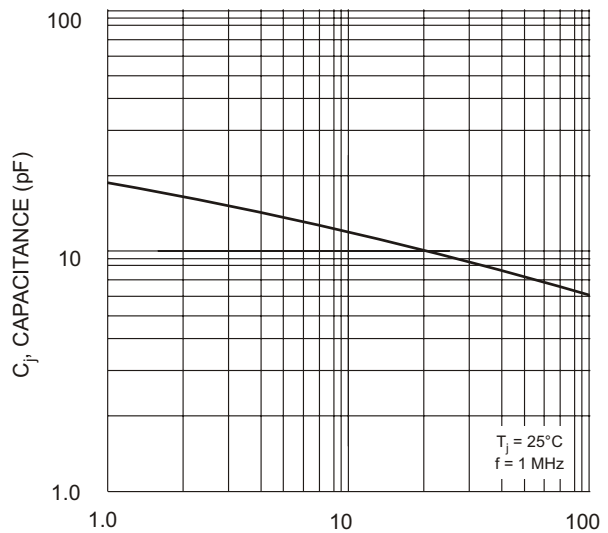
$T_A$ , AMBIENT TEMPERATURE (°C)  
Fig. 1 Forward Current Derating Curve



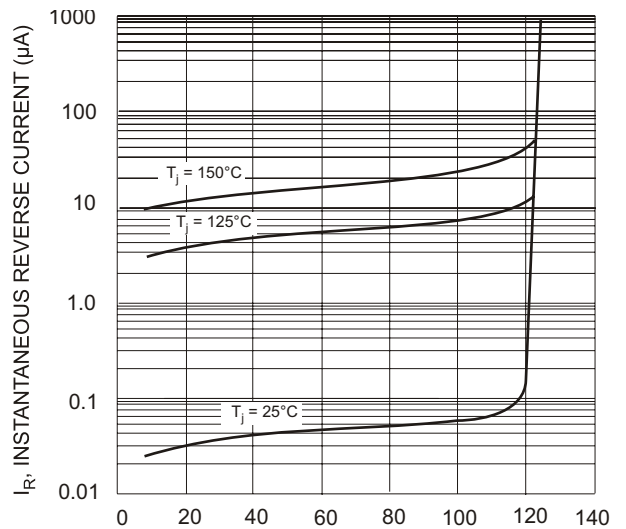
$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz  
Fig. 3 Max Non-Repetitive Peak Fwd Surge Current



$V_R$ , REVERSE VOLTAGE (V)  
Fig. 4 Typical Junction Capacitance



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)  
Fig. 5 Typical Reverse Characteristics