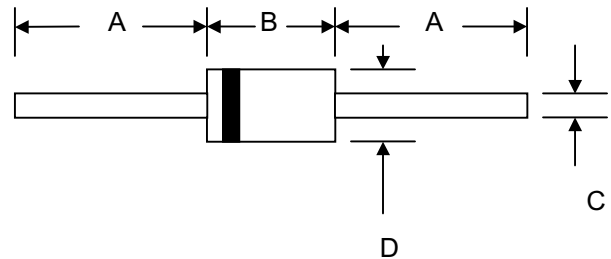


**Data Sheet 2551 Rev. B**

**Features**

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



**Mechanical Data**

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.35 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

DO-41		
Dim	Min	Max
A	1.000(25.40)	—
B	0.160(4.06)	0.205(5.21)
C	0.028(0.71)	0.034(0.86)
D	0.079(2.00)	0.107(2.72)
All Dimensions in inch( 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	1N 4001	1N 4002	1N 4003	1N 4004	1N 4005	1N 4006	1N 4007	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$								V
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	
DC Blocking Voltage	$V_R$								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_A = 75^{\circ}\text{C}$	$I_o$	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30							A
Forward Voltage @ $I_F = 1.0\text{A}$	$V_{FM}$	1.0							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 50							$\mu\text{A}$
Typical Junction Capacitance (Note 2)	$C_J$	15							pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{THJA}$	50							$^{\circ}\text{C/W}$
Operating Temperature Range	$T_J$	-65 to +175							$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-65 to +175							$^{\circ}\text{C}$

**\*Glass passivated forms are available upon request**

Note: 1. Leads maintained 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 D.C.

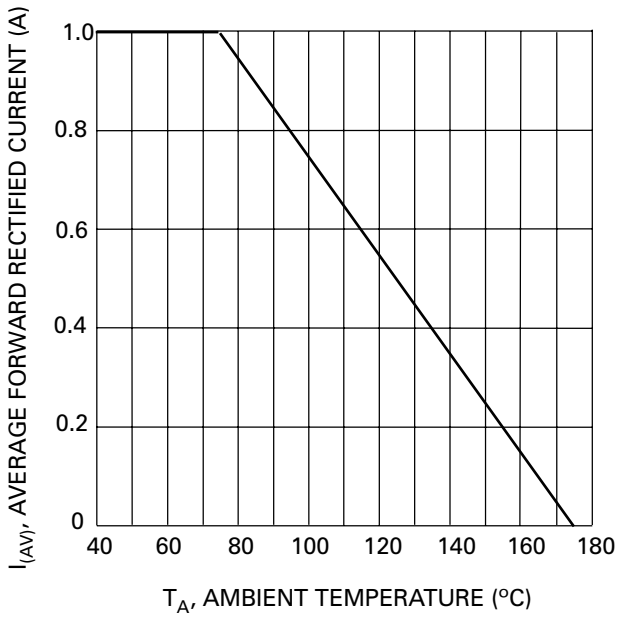


Fig. 1 Forward Current Derating Curve

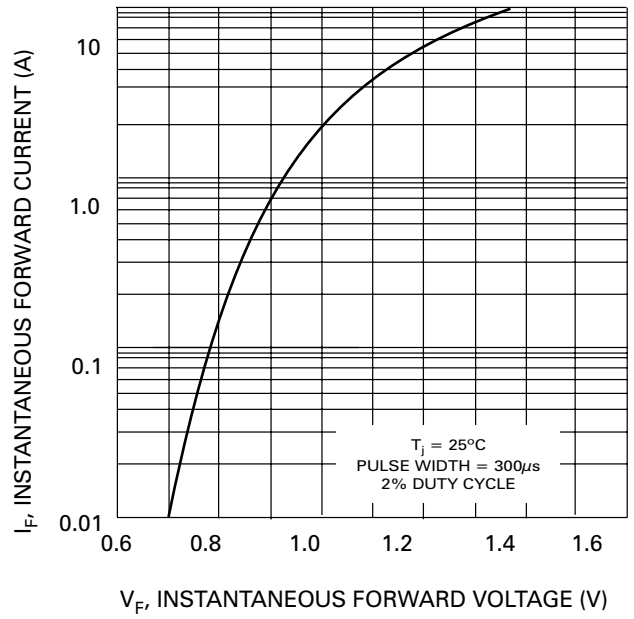


Fig. 2 Typical Forward Characteristics

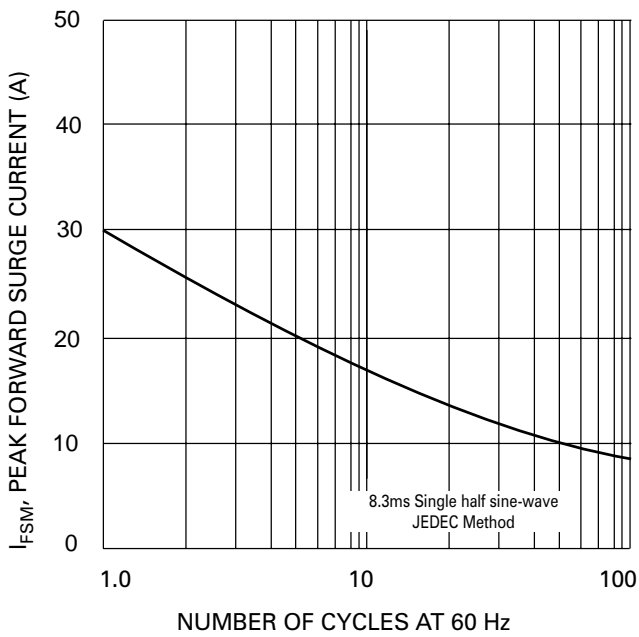


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

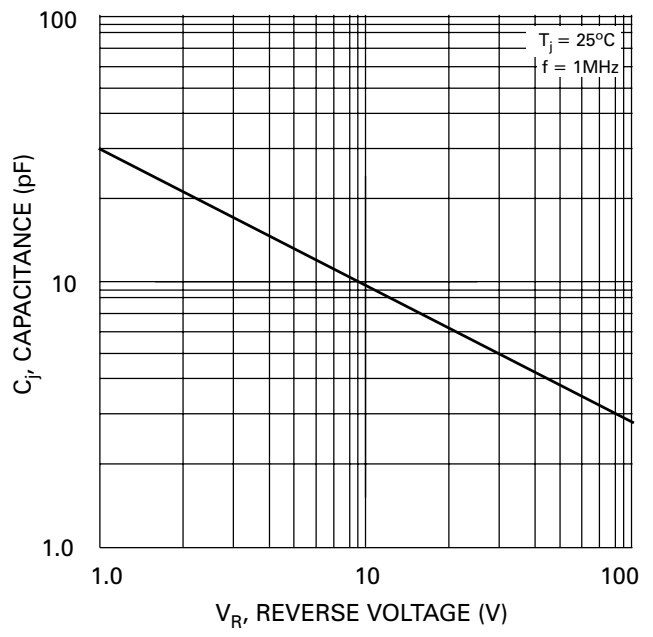


Fig. 4 Typical Junction Capacitance