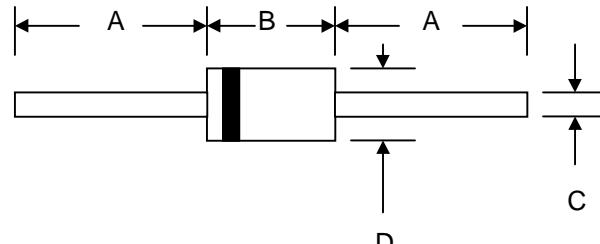


Features

- 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
- Lead Free: For RoHS / Lead Free Version**

DO-41		
Dim	Min	Max
A	24.5	—
B	4.06	5.21
C*	0.60	0.80
D	2.00	3.00
All Dimensions in mm		

*Rectifiers available with Ø 0.55 mm terminals; C: 0.5~0.6 mm

Maximum Ratings and Electrical Characteristics $\text{@T}_A=25^\circ\text{C}$ 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}								
Working Peak Reverse Voltage	V _{RWM}	50	100	200	400	600	800	1000	V
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)	I _O								A
$\text{@T}_A = 75^\circ\text{C}$									
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}								A
Forward Voltage $\text{@I}_F = 1.0\text{A}$	V _{FM}								V
Peak Reverse Current $\text{@T}_A = 25^\circ\text{C}$	I _{RM}								μA
$\text{@T}_A = 100^\circ\text{C}$									
At Rated DC Blocking Voltage									
Typical Junction Capacitance (Note 2)	C _j								pF
Typical Thermal Resistance Junction to Ambient (Note 1)	R _{θ JA}								K/W
Operating Temperature Range	T _j								°C
Storage Temperature Range	T _{STG}								°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.

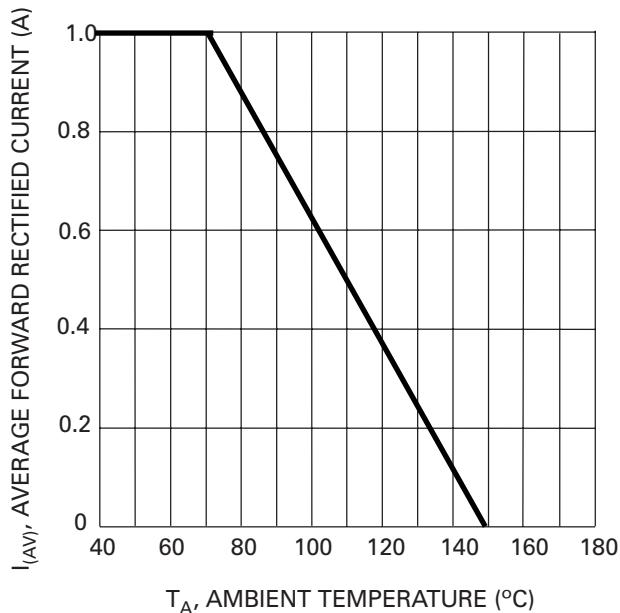


Fig. 1 Forward Current Derating Curve

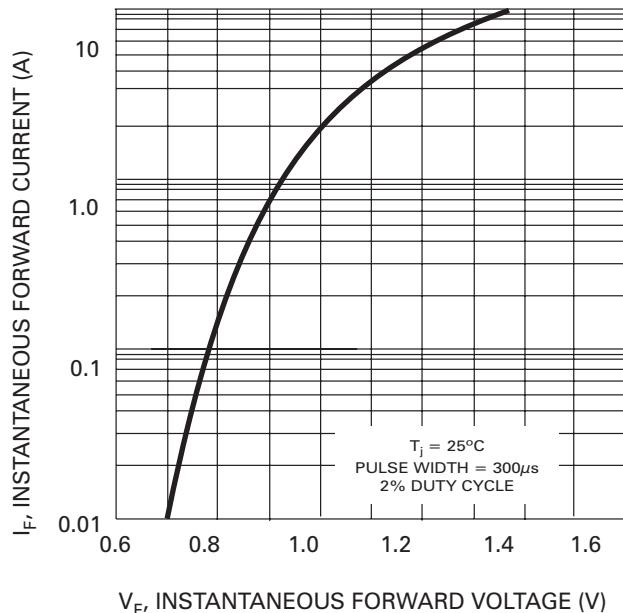


Fig. 2 Typical Forward Characteristics

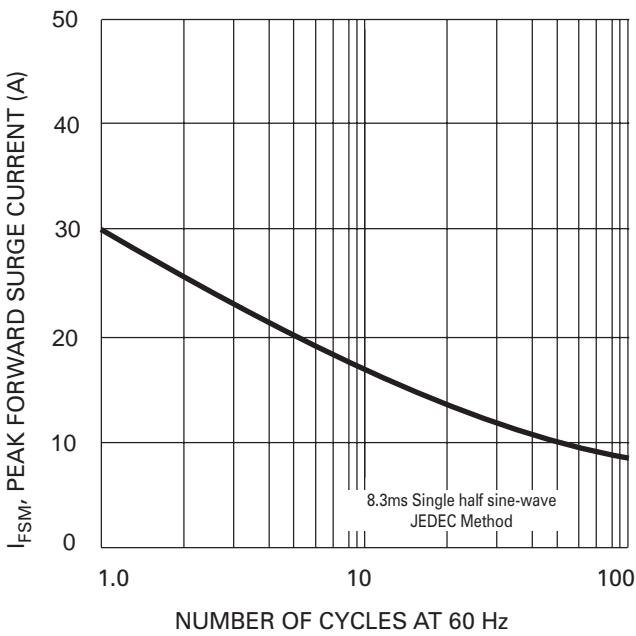


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

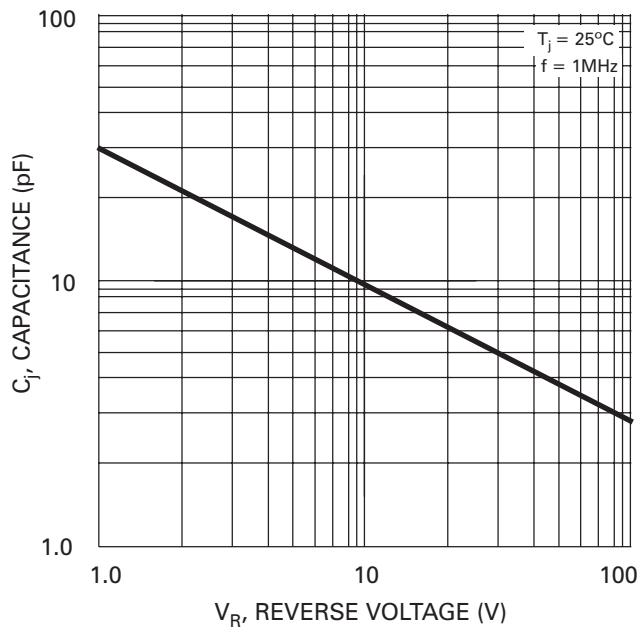


Fig. 4 Typical Junction Capacitance