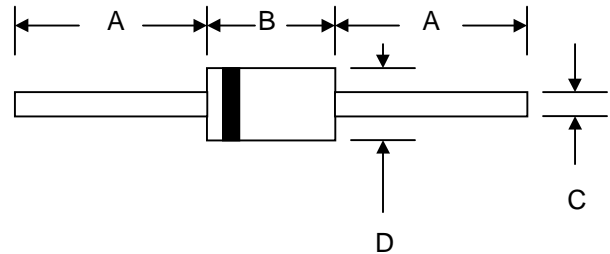


#### Features

- 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**



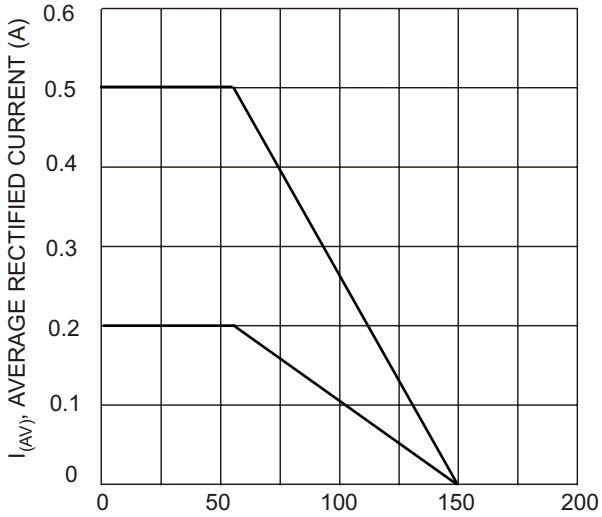
DO-41		
Dim	Min	Max
A	24.5	—
B	4.06	5.21
C	0.60	0.80
D	2.00	3.00
All Dimensions in mm		

#### 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	R1500	R2000	R3000	R4000	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$					V
Working Peak Reverse Voltage	$V_{RWM}$	1500	2000	3000	4000	
DC Blocking Voltage	$V_R$					
RMS Reverse Voltage	$V_{R(RMS)}$	1050	1400	2100	2800	V
Average Rectified Output Current (Note 1) @ $T_A = 55^\circ\text{C}$	$I_O$	500		200		mA
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30		25		A
Forward Voltage @ $I_F = I_O$	$V_{FM}$	3.0				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)	$C_j$	7.0				pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	117				K/W
Operating Temperature Range	$T_j$	-55 to +150				$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150				$^\circ\text{C}$

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.



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

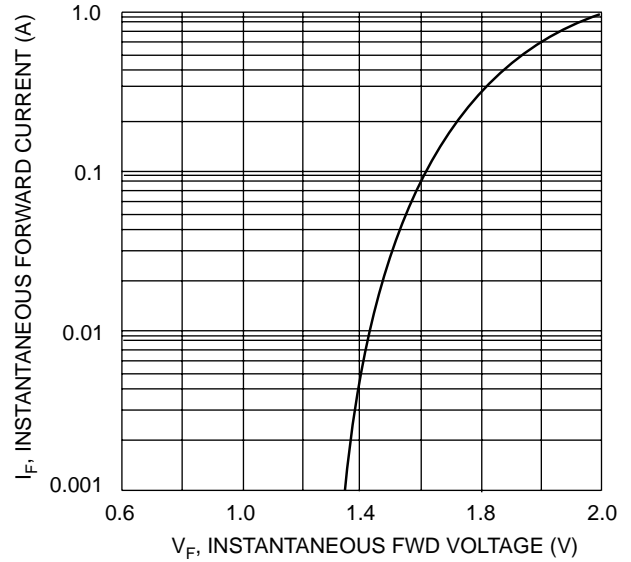


Fig. 2 Typical Forward Characteristics

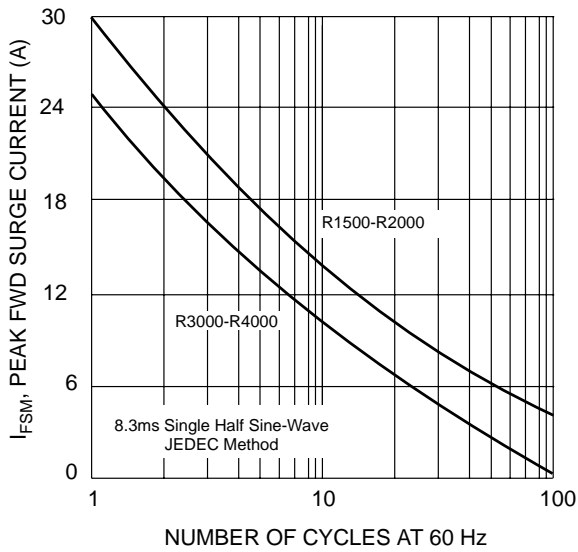


Fig. 3 Peak Fwd Surge Current vs # of Cycles @ 60 Hz

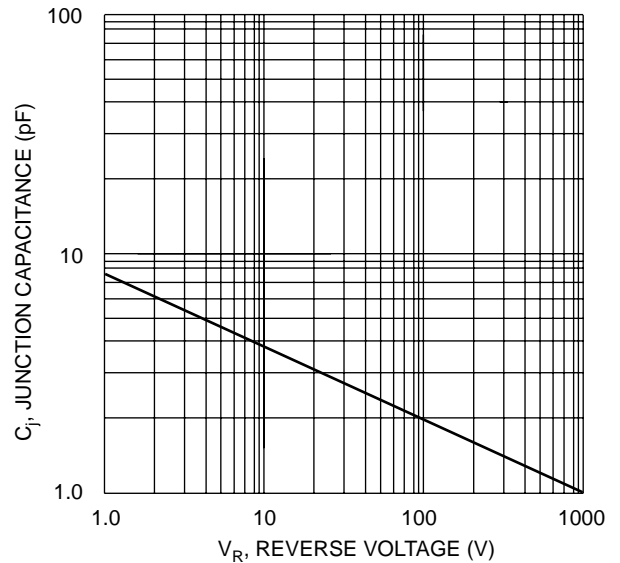


Fig. 4 Typical Junction Capacitance