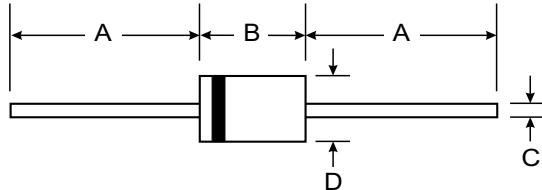


### Features

- High Voltage to 3000V with Low Leakage
- 1.5kV to 3kV  $V_{RRM}$
- Surge Ratings of 25A - 30A
- Plastic Material - UL Flammability Classification Rating 94V-0



### 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 Plastic		
Dim	Min	Max
<b>A</b>	25.40	—
<b>B</b>	4.06	5.21
<b>C</b>	0.71	0.884
<b>D</b>	2.00	2.72

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	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$				
Working Peak Reverse Voltage	$V_{RWM}$				
DC Blocking Voltage	$V_R$				
RMS Reverse Voltage	$V_R(\text{RMS})$	1050	1400	2100	V
Average Rectified Output Current (Note 1)	$I_O$		500	200	mA
$\text{@ } T_L = 55^\circ\text{C}$					
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 • $I_F = 500\text{mA}$ • $I_F = 200\text{mA}$	$V_{FM}$	2.0	—	3.0	V
Peak Reverse Leakage Current at Rated DC Blocking Voltage	$I_{RM}$		5.0		$\mu\text{A}$
Typical Junction Capacitance (Note 2)	$C_J$	8.0	7.0		pF
Typical Thermal Resistance Junction to Ambient	$R_{0JA}$	70	117		K/W
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +125			$^\circ\text{C}$

Notes:

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

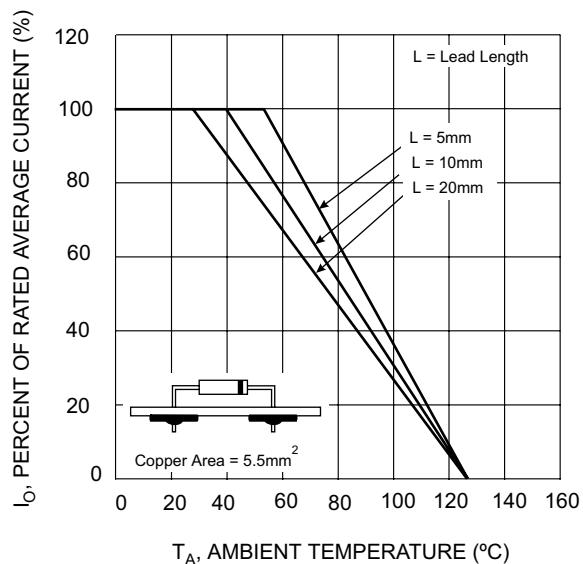


Fig. 1 Current Derating for Various Lead Lengths

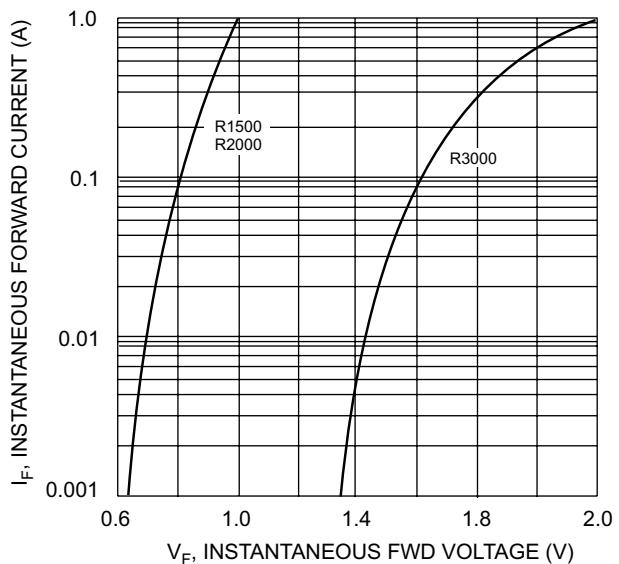


Fig. 2 Typical Forward Characteristics

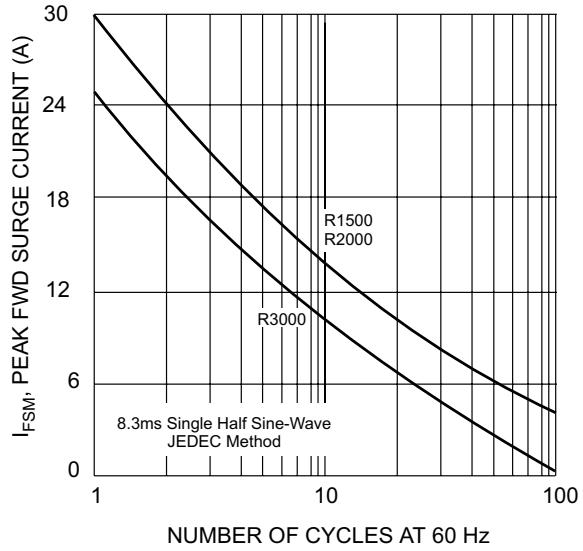


Fig. 3 Peak Fwd Surge Current vs # of Cycles @ 60 Hz

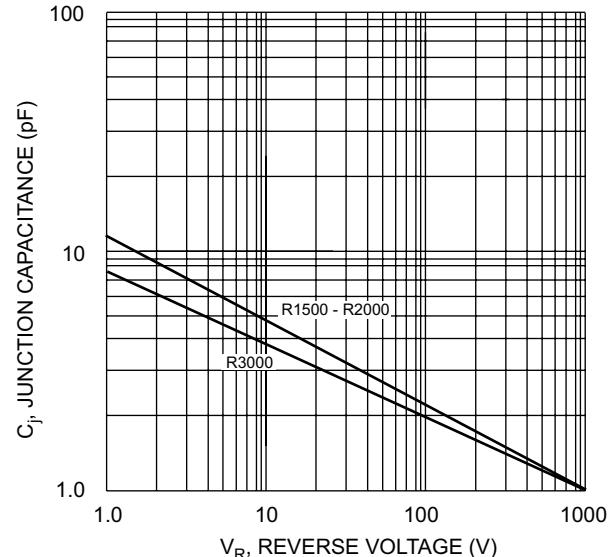


Fig. 4 Typical Junction Capacitance