

# R1500 - R3000

## **HIGH VOLTAGE RECTIFIER DIODES**

#### **Features**

- High voltage
- High current capability
- Low leakage current
- High surge capability
- Low cost

#### **Mechanical Data**

• Case : DO-41 Molded plastic

• Epoxy: UL94V-O rate flame retardant

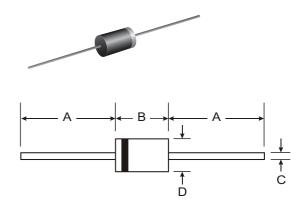
Lead : Axial lead solderable per MIL-STD-202,

Method 208 guaranteed

Polarity : Color band denotes cathode end

Mounting position : AnyWeight : 0.339 gram





DO-41					
Dim	Min	Max			
Α	25.40	_			
В	4.06	5.21			
С	0.71	0.864			
D	2.00	2.72			
All Dimensions in mm					

### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

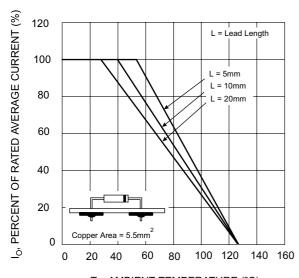
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	R1500	R2000	R3000	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	1500	2000	3000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	1050	1400	2100	V
Average Rectified Output Current (Note 1) @ T <sub>L</sub> = 55°C	lo	500		200	mA
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30		25	А
Forward Voltage @ I <sub>F</sub> = 500mA @ I <sub>F</sub> = 200mA	V <sub>FM</sub>	2	2.0	3.0	V
Peak Reverse Leakage Current at Rated DC Blocking Voltage	I <sub>RM</sub>	5	.0		μА
Typical Junction Capacitance (Note 2)	Cj	8.0		7.0	pF
Typical Thermal Resistance Junction to Ambient	$R_{ heta JA}$	70		117	K/W
Operating and Storage Temperature Range	T <sub>j,</sub> T <sub>STG</sub>	-65 to +125		°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.  $\,$ 





 $\label{eq:TA} T_{A}\text{, AMBIENT TEMPERATURE (°C)}$  Fig. 1 Current Derating for Various Lead Lengths

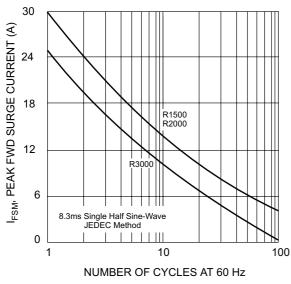


Fig. 3 Peak Fwd Surge Current vs # of Cycles @ 60 Hz

