

## R1500 - R3000

### HIGH VOLTAGE RECTIFIER

#### **Features**

- High Voltage to 3000V with Low Leakage
- 1.5kV to 3kV V<sub>RRM</sub>
- Surge Ratings of 25A 30A
- Plastic Material UL Flammability Classification Rating 94V-0

# $\begin{array}{c|c} A & \longrightarrow & B & \longrightarrow & A & \longrightarrow \\ \hline & \uparrow & & \downarrow & \\ \hline & \uparrow & & C & \\ \end{array}$

### **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: AnyMarking: Type Number

Dim	Min	Max			
Α	25.40	_			
В	4.06	5.21			
С	0.71	0.884			
D	2.00	2.72			
All Dimensions in mm					

DO-41 Plastic

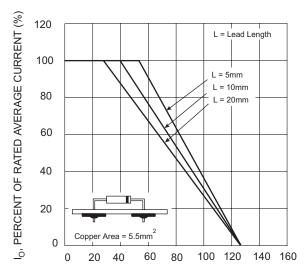
### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

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) @ $T_L = 55^{\circ}C$	Io	500		200	mA
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30		25	А
Forward Voltage	V <sub>FM</sub>	2	.0	3.0	V
Peak Reverse Leakage Current at Rated DC Blocking Voltage	I <sub>RM</sub>	RM 5.0		μА	
Typical Junction Capacitance (Note 2)	Cj	8	.0	7.0	pF
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	7	0	117	K/W
Operating and Storage Temperature Range	$T_{j,}T_{STG}$	-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.



T<sub>A</sub>, AMBIENT TEMPERATURE (°C)
Fig. 1 Current Derating for Various Lead Lengths

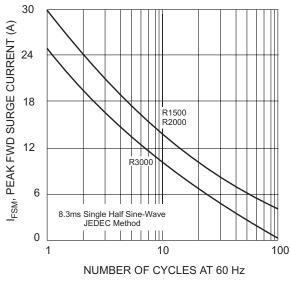


Fig. 3 Peak Fwd Surge Current vs # of Cycles @ 60 Hz

