

## R1200 THRU R2000

#### HIGH VOLTAGE SILICON RECTIFIER

Reverse Voltage - 1200 to 2000 Volts Forward Current - 0.5 Ampere

#### **FEATURES**

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability

#### **MECHANICAL DATA**

Case: JEDEC DO-41 molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750,

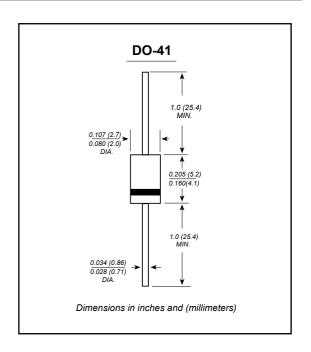
Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.012 ounce, 0.33 grams





#### 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	R1200	R1500	R1800	R2000	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	1200	1500	1800	2000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	840	1050	1260	1400	V
Average Rectified Output Current (Note 1) @ Ta= 50°C	Io	500				mA
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30				А
Forward Voltage @ I <sub>F</sub> = 500mA	V <sub>FM</sub>	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	30				pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$		70		117	K/W
Operating and Storage Temperature Range	$T_{j,}T_{STG}$	-65 to +150				°C

Notes:

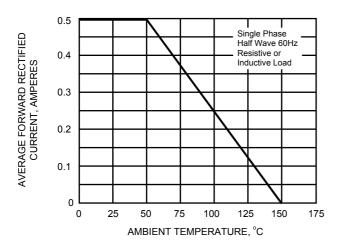
- 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.
- 2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.



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### **RATINGS AND CHARACTERISTIC CURVES**

FIG.1 - FORWARD CURRENT DERATING CURVE



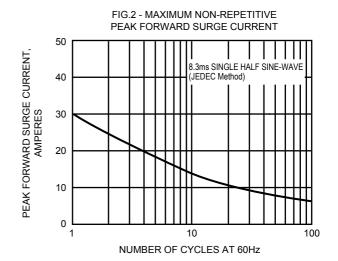


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

