



# R1200 THRU R2000

## HIGH VOLTAGE SILICON RECTIFIER

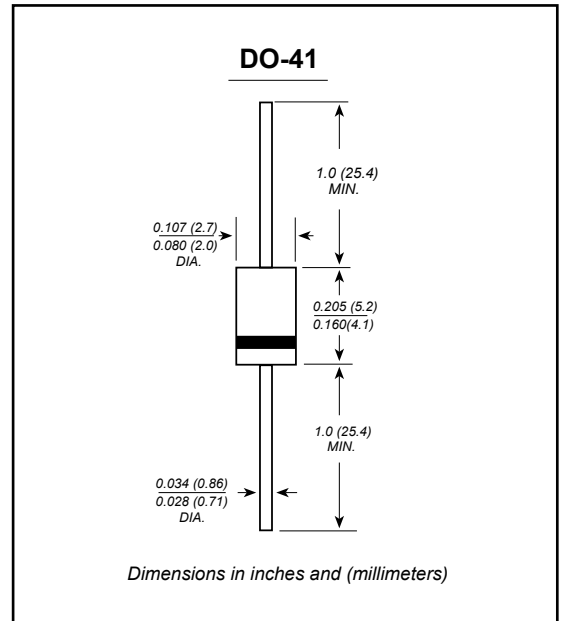
Reverse Voltage - 1200 to 2000 Volts    Forward Current - 0.5 Ampere

### 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) @ T <sub>A</sub> = 50°C	I <sub>O</sub>	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				A
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				μA
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	30				pF
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	70			117	K/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-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

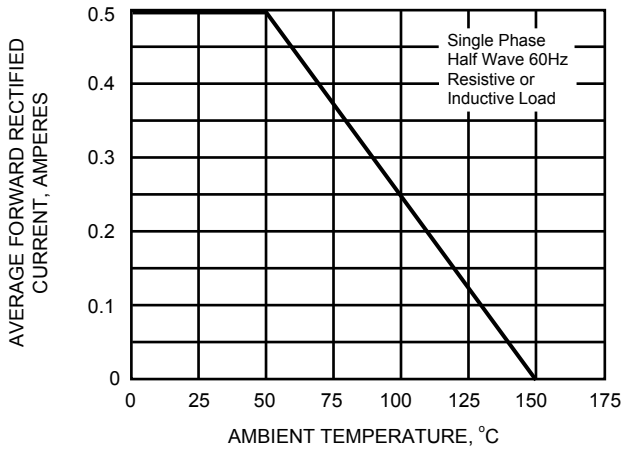


FIG.2 - MAXIMUM NON-REPETITIVE  
PEAK FORWARD SURGE CURRENT

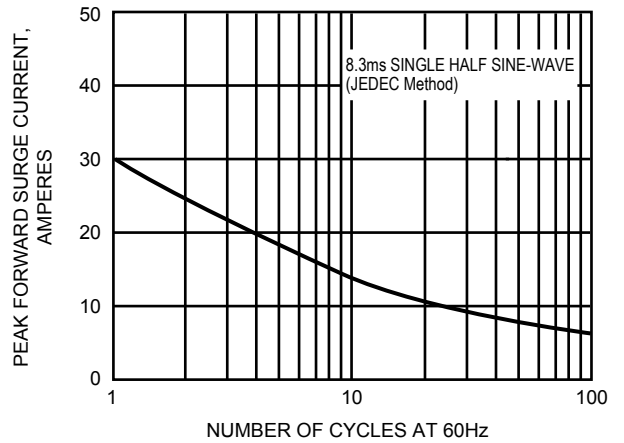


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

