



# SOLID STATE INC.

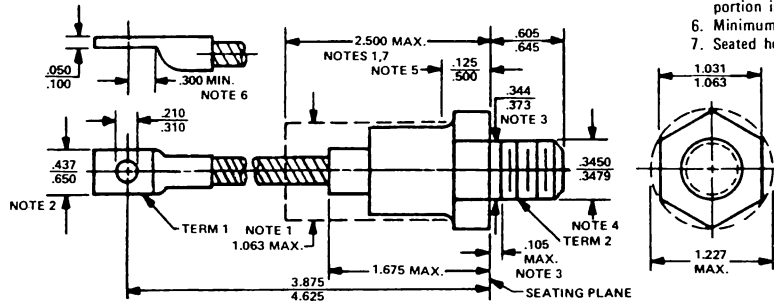
46 FARRAND STREET  
BLOOMFIELD, NEW JERSEY 07003

www.solidstateinc.com

**DO8**

**NOTES:**

1. The device with exception of the hexagon, thread and flexible lead extension lies within the cylinder defined by Dim. 1.063 Max. and length 2.500 Max.
2. Angular orientation of terminal with respect to hexagonal portion is undefined. Square or radius on end of terminal is optional.
3. Length of incomplete or undercut threads of Dim. .344 Min. and .373 Max.
4. Pitch diameter of 3/8-24 UNF-2A (coated) threads (ASA B1.1-1960).
5. A chamfer (or undercut) on one or both ends of the hexagonal portion is optional.
6. Minimum flat.
7. Seated height with lead bent at right angle.



Reverse polarity: Stud is Anode

JEDEC Numbers		Peak Reverse Voltage
1N2436		50V
1N2437	1N3288A 1N4587	100V
1N2438		150V
1N2439	1N3289A 1N4588	200V
1N2440		250V
1N2441	1N3290A 1N4589	300V
1N2442		350V
1N2443	1N3291A 1N4590	400V
1N2444	1N3292A 1N4591	500V
1N2445	1N3293A 1N4592	600V
	1N3294A 1N4593	800V
	1N3295A 1N4594	1000V
	1N3296A 1N4595	1200V
	1N3297A 1N4596	1400V

add R suffix for Reverse Polarity

## DO205AA (DO8)

- Soft recovery
- 2500 Amps Surge Rating
- Glass to metal seal construction

### Electrical Characteristics

Average forward current	IF(AV) 150 Amps	T <sub>C</sub> = 148°C, Half Sine Wave, R <sub>θJC</sub> = 0.35°C/W
Maximum surge current	IFSM 2500 Amps	8.3ms, half sine, T <sub>J</sub> = 200°C
Max I <sup>2</sup> t for fusing	I <sup>2</sup> t 26000 A <sup>2</sup> s	
Max peak forward voltage	V <sub>FM</sub> 1.1 Volts	I <sub>FM</sub> = 200A: T <sub>J</sub> = 25°C*
Max peak reverse current	I <sub>RM</sub> 50 μA	V <sub>RRM</sub> , T <sub>J</sub> = 25°C
Max peak reverse current	I <sub>RM</sub> 5.0 mA	V <sub>RRM</sub> , T <sub>J</sub> = 150°C
Max Recommended Operating Frequency	7.5kHz	

\*Pulse test: Pulse width 300 μsec. Duty cycle 2%

### Thermal and Mechanical Characteristics

Storage temperature range	T <sub>STG</sub>	-65°C to 200°C
Operating junction temp range	T <sub>J</sub>	-65°C to 200°C
Maximum thermal resistance	R <sub>θJC</sub>	0.35°C/W Junction to Case
Mounting torque		80-100 inch pounds
Weight		2.75 ounces (78 grams) typical

Figure 1  
Typical Forward Characteristics

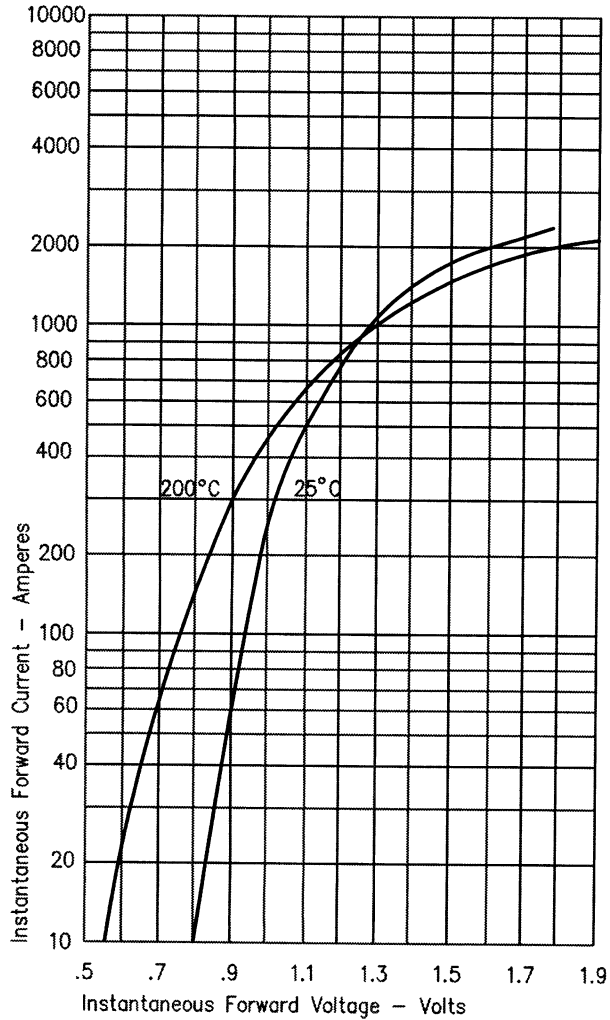


Figure 3  
Forward Current Derating

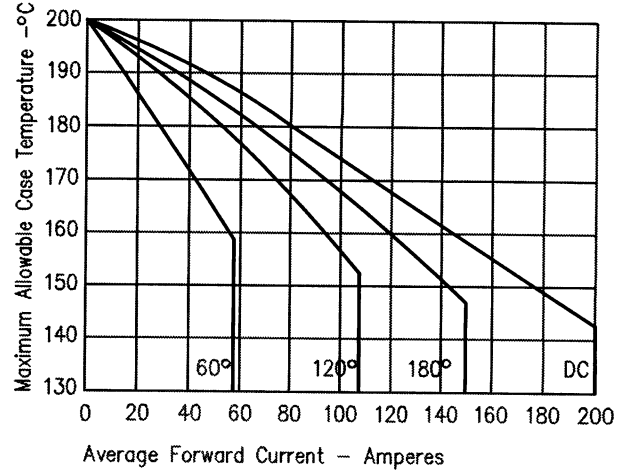


Figure 4  
Maximum Forward Power Dissipation

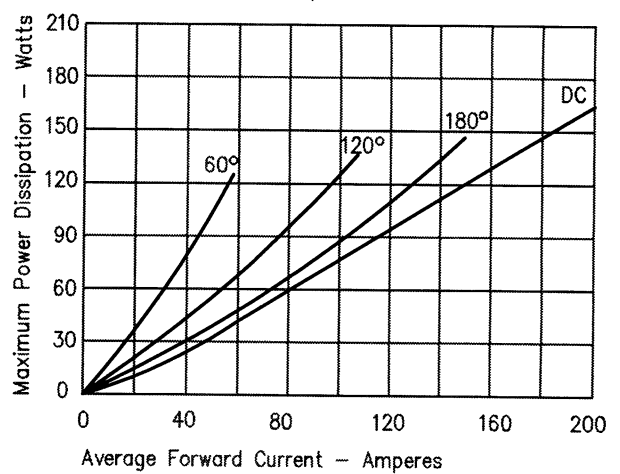


Figure 2  
Typical Reverse Characteristics

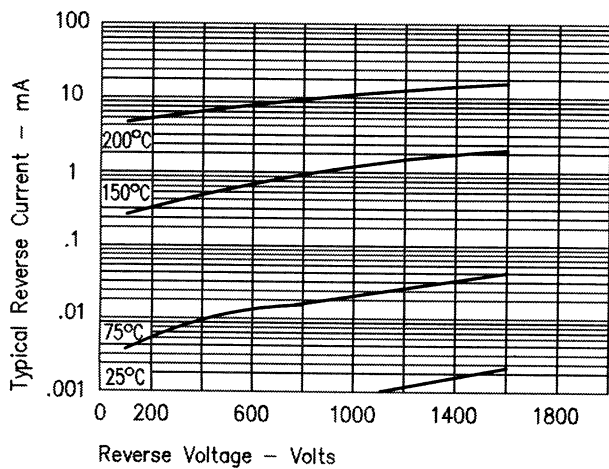


Figure 5  
Transient Thermal Impedance

