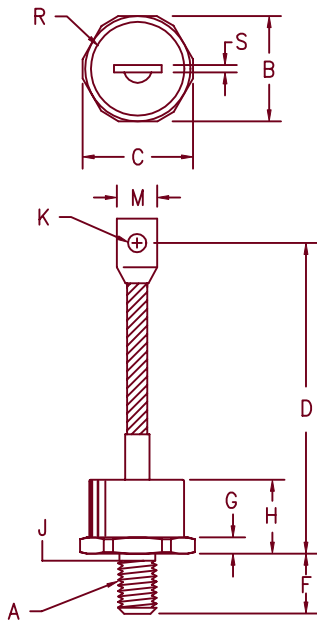


Military Silicon Power Rectifier

1N3289–1N3295



Notes:

1. 3/8–24 UNF–3A
2. Full threads within 2 1/2 threads
3. Standard polarity: Stud is Cathode
Reverse polarity: Stud is Anode

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	---	---	---	---	1,3
B	1.050	1.060	26.67	26.92	
C	---	1.166	---	29.61	
D	4.30	4.65	109.22	118.11	
F	.610	.640	15.49	16.25	2
G	.213	.233	5.41	5.66	
H	---	.745	---	18.92	
J	.344	.373	8.74	9.47	
K	.276	.286	7.01	7.26	Dia
M	.465	.670	11.81	17.02	
R	.625	.850	15.88	21.59	
S	.050	.120	1.27	3.05	

DO205AA (D08)

- Available in JAN, JANTX and JANTXV
- MIL–PRF–19500/246
- Glass Passivated Die
- 1600 Amps Surge Rating
- Glass to metal seal construction
- VRRM to 1000V

Microsemi Catalog Number Standard

Reverse

Peak Reverse Voltage

1N3289	1N3289R	200V
1N3291	1N3291R	400V
1N3293	1N3293R	600V
1N3294	1N3294R	800V
1N3295	1N3295R	1000V

Electrical Characteristics

Average forward current	$I_F(AV)$ 100 Amps	$T_C = 134^\circ C$, Half Sine Wave, $R_{\theta JC} = 0.4^\circ C/W$
Maximum surge current	I_{FSM} 1600 Amps	8.3ms, half sine, $T_J = 200^\circ C$
Max $I^2 t$ for fusing	$I^2 t$ 10700 $A^2 s$	
Max peak forward voltage	V_{FM} 1.55 Volts	$I_{FM} = 310A$; $T_J = 25^\circ C$ *
Max peak reverse current	I_{RM} 10 mA	V_{RRM} , $T_J = 25^\circ C$
Max peak reverse current	I_{RM} 30 mA	V_{RRM} , $T_J = 200^\circ C$
Max Recommended Operating Frequency	7.5kHz	

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

Thermal and Mechanical Characteristics

Storage temperature range	T_{STG}	$-65^\circ C$ to $200^\circ C$
Operating junction temp range	T_J	$-65^\circ C$ to $200^\circ C$
Maximum thermal resistance	$R_{\theta JC}$	$0.4^\circ C/W$ Junction to Case
Mounting torque		100 inch pounds maximum
Weight		2.75 ounces (78 grams) typical

MILITARY

1N3289-1N3295

Figure 1
Typical Forward Characteristics

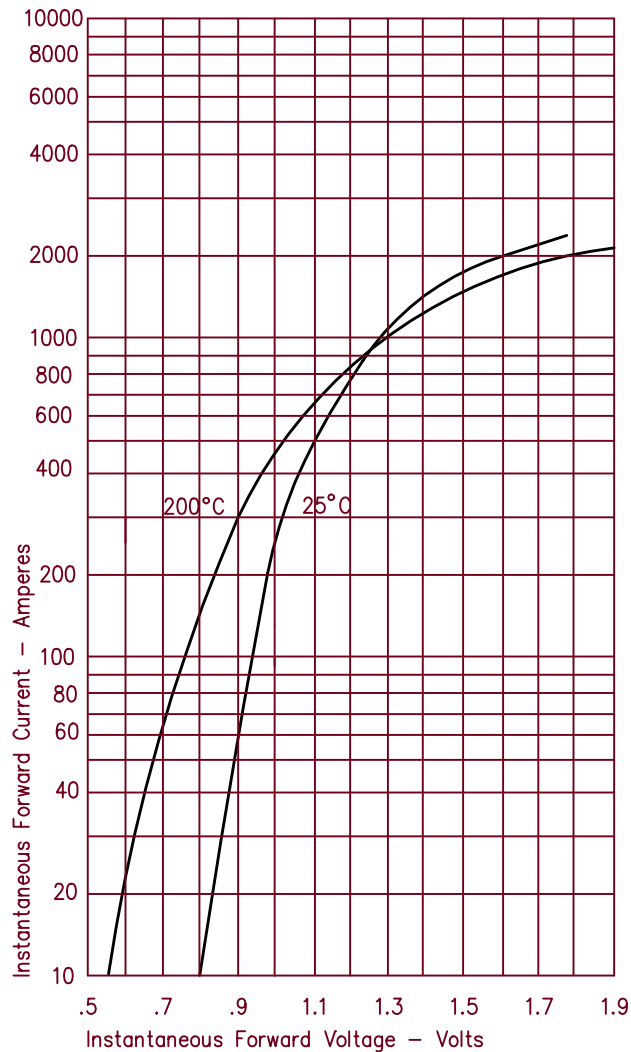


Figure 3
Forward Current Derating

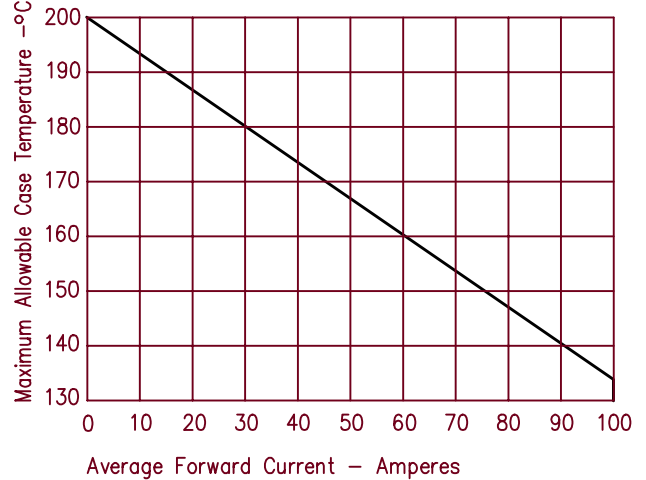


Figure 5
Transient Thermal Impedance

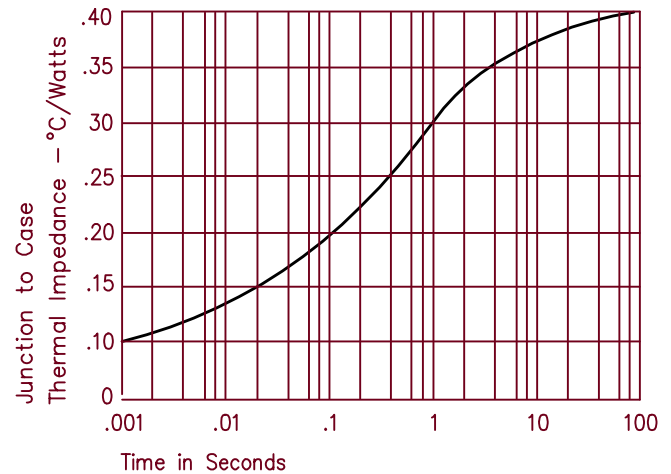


Figure 2
Typical Reverse Characteristics

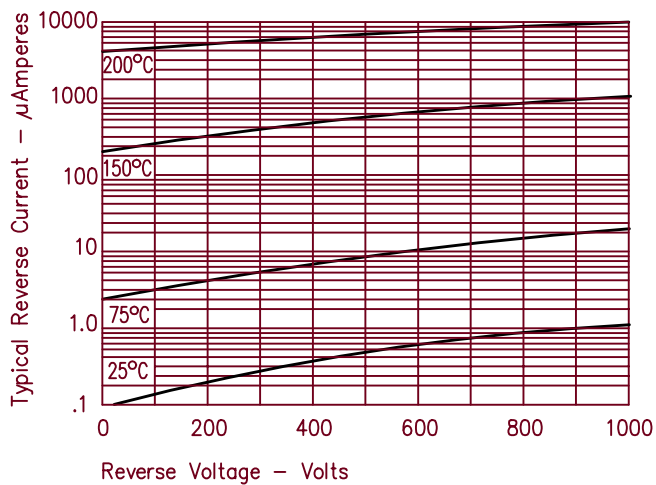


Figure 7
Maximum Nonrepetitive Surge Current

