

HIGH RELIABILITY POWER RECTIFIER

Qualified per MIL-PRF-19500/260

- Glass Passivated Die
- Glass to Metal Seal Construction
- 240 Amps Surge Rating
- VRRM to 1000 Volts

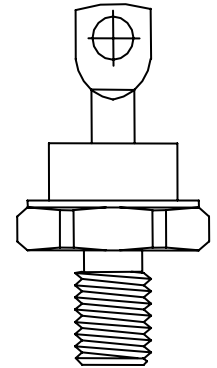
DEVICES

1N1202A	1N1202AR	1N3671A	1N3671AR
1N1204A	1N1204AR	1N3673A	1N3673AR
1N1206A	1N1206AR		

LEVELS
JAN
JANTX
JANTXV

ABSOLUTE MAXIMUM RATINGS ($T_C = +25^\circ\text{C}$ unless otherwise noted)

Parameters / Test Conditions	Symbol	Value	Unit
Peak Repetitive Reverse Voltage 1N1202A 1N1202AR 1N1204A 1N1204AR 1N1206A 1N1206AR 1N3671A 1N3671AR 1N3673A 1N3673AR	V_{RWM}	200 400 600 800 1000	V
Average Forward Current, $T_C = 150^\circ$	I_F	12	A
Peak Surge Forward Current @ $t_p = 8.3\text{ms}$, half sinewave, $T_C = 200^\circ\text{C}$, $T = 1/120\text{s}$	I_{FSM}	240	A
Thermal Resistance, Junction to Case	$R_{\theta jc}$	2.0	$^\circ\text{C/W}$
Operating Case Temperature Range	T_C	-65°C to 150°C	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65°C to 200°C	$^\circ\text{C}$



DO-203AA (DO-4)

ELECTRICAL CHARACTERISTICS ($T_A = +25^\circ\text{C}$, unless otherwise noted)

Parameters / Test Conditions	Symbol	Min.	Max.	Unit
Forward Voltage $I_F = 38\text{A}$, $T_j = 25^\circ\text{C}^*$	V_F		1.35	V
Forward Voltage $I_F = 240\text{A}$, $T_j = 25^\circ\text{C}^*$	V_F		2.3	V
Reverse Current $V_R = 200$, $T_j = 25^\circ\text{C}$ $V_R = 400$, $T_j = 25^\circ\text{C}$ $V_R = 600$, $T_j = 25^\circ\text{C}$ $V_R = 800$, $T_j = 25^\circ\text{C}$ $V_R = 1000$, $T_j = 25^\circ\text{C}$	I_R		5	μA
Reverse Current $V_R = 200$, $T_j = 150^\circ\text{C}$ $V_R = 400$, $T_j = 150^\circ\text{C}$ $V_R = 600$, $T_j = 150^\circ\text{C}$ $V_R = 800$, $T_j = 150^\circ\text{C}$ $V_R = 1000$, $T_j = 150^\circ\text{C}$	I_R		1.0	mA

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

Note:

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GRAPHS

FIGURE 1
TYPICAL FORWARD CHARACTERISTICS

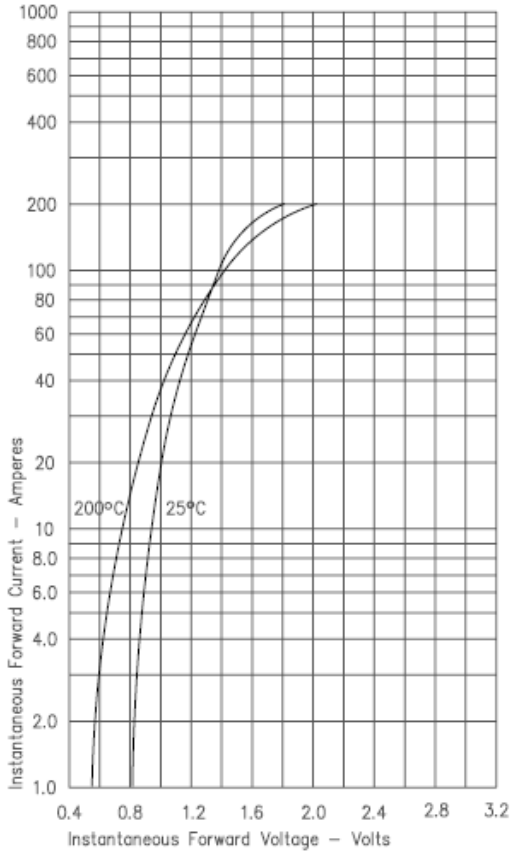


FIGURE 3
FORWARD CURRENT DERATING

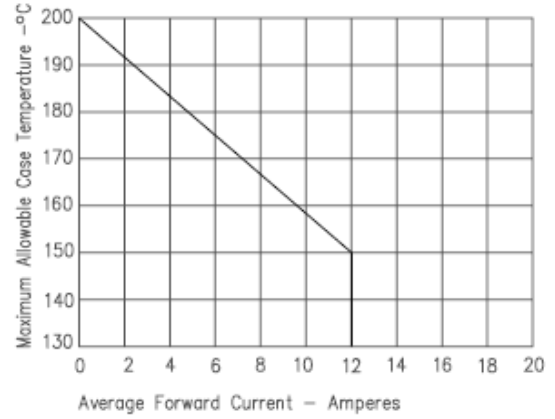


FIGURE 5
TRANSIENT THERMAL IMPEDANCE

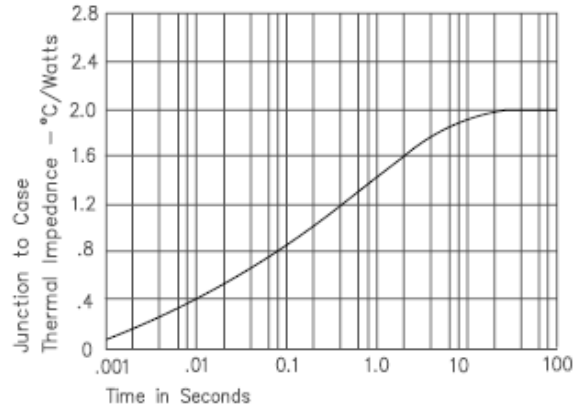
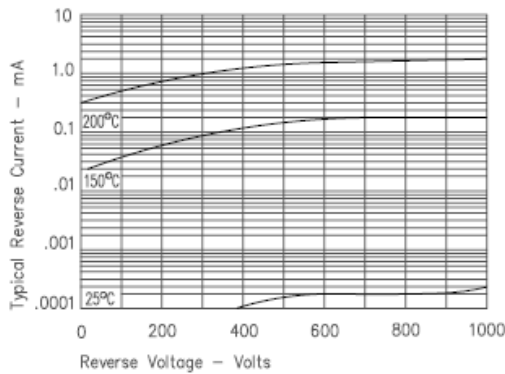
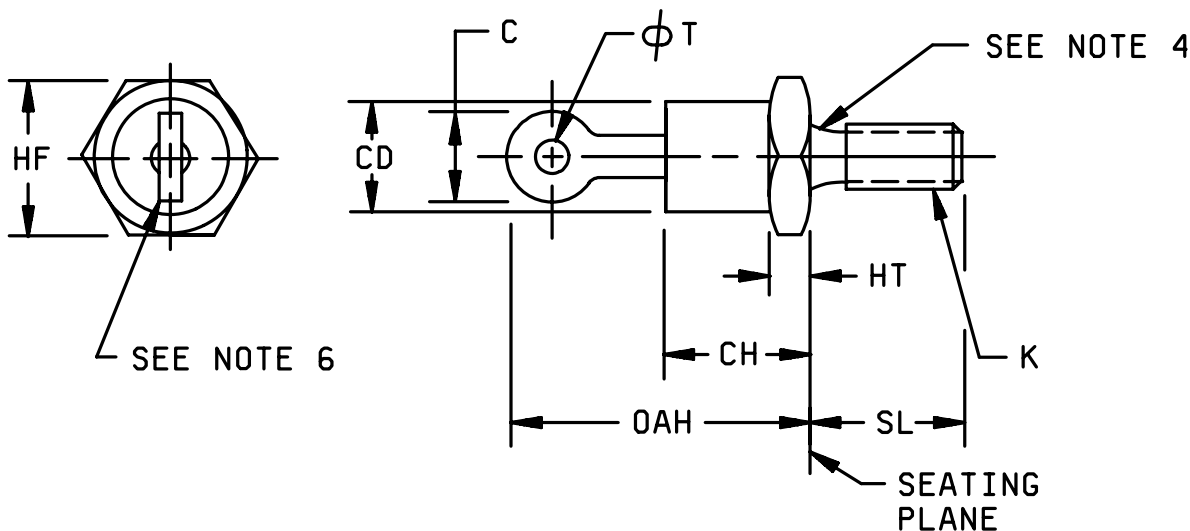


FIGURE 2
TYPICAL REVERSE CHARACTERISTICS



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PACKAGE DIMENSIONS



NOTES:

1. Dimensions are in inches.
2. Millimeters are given for general information only.
3. Units must not be damaged by torque of 15 inch-pounds applied to 10-32NF-2B nut assembled on thread
4. Diameter of unthreaded portion .189 inch (4.80 mm) max and .163 inch (4.14 mm) min.
5. Complete threads to extend to within 2.5 threads of seating plane.
6. Angular orientation of this terminal is undefined.
7. Max pitch diameter of plated threads shall be basic pitch diameter .169 inch (4.31 mm) reference FED-STD-H28 (Screw Thread Standards for Federal Services.)
8. The A.S.A. thread reference is 10-32UNF2A.
9. Terminal shape is unrestricted.
10. Reversed (anode to stud) units shall be marked with an R following the last digit in the type number
11. In accordance with ASME Y14.5M, diameters are equivalent to ϕ x symbology.

Ltr	Dimensions				Notes
	Inches		Millimeters		
	Min	Max	Min	Max	
CH		.405		10.29	
CD		.424		10.77	
HF	.424	.437	10.77	11.10	
HT	.075	.175	1.90	4.44	
OAH		.800		20.32	
C		.250		6.35	9
ϕ T	.060		1.52		
SL	.422	.453	10.72	11.51	
K					3,5,7

Physical dimensions (DO-203AA, formerly DO-4)

1N1202A, 1N1204A, 1N1206A, 1N3671A, 1N3673A and AR versions, and 1N1124A, 1N1126A, 1N1128A, and RA versions 1N3649, 1N3650, and R versions.