

## HIGH RELIABILITY POWER RECTIFIER

Qualified per MIL-PRF-19500/260

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

### DEVICES

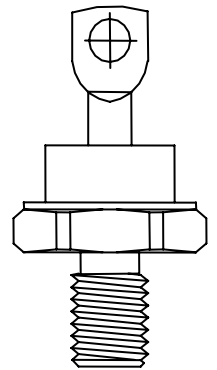
<b>1N1124A</b>	<b>1N1124RA</b>	<b>1N3649</b>	<b>1N3649R</b>
<b>1N1126A</b>	<b>1N1126RA</b>	<b>1N3650</b>	<b>1N3650R</b>
<b>1N1128A</b>	<b>1N1128RA</b>		

### LEVELS

**JAN**

### ABSOLUTE MAXIMUM RATINGS (T<sub>C</sub> = +25°C unless otherwise noted)

Parameters / Test Conditions	Symbol	Value	Unit
Peak Repetitive Reverse Voltage 1N1124A    1N1124RA 1N1126A    1N1126RA 1N1128A    1N1128RA 1N3649      1N3649R 1N3650      1N3650R	V <sub>RWM</sub>	200 400 600 800 1000	V
Average Forward Current, T <sub>C</sub> = 150°	I <sub>F</sub>	3.3	A
Peak Surge Forward Current @ t <sub>p</sub> = 8.3ms, half sinewave, T <sub>C</sub> = 150°C, T = 1/120s	I <sub>FSM</sub>	25	A
Thermal Resistance, Junction to Case	R <sub>θjc</sub>	2.0	°C/W
Operating Case Temperature Range	T <sub>C</sub>	-65°C to 150°C	°C
Storage Temperature Range	T <sub>stg</sub>	-65°C to 200°C	°C



**DO-203AA(DO-4)**

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = +25°C, unless otherwise noted)

Parameters / Test Conditions	Symbol	Min.	Max.	Unit
Forward Voltage I <sub>F</sub> = 10A, T <sub>j</sub> = 25°C*	V <sub>F</sub>		2.2	V
Reverse Current V <sub>R</sub> = 200, T <sub>j</sub> = 25°C V <sub>R</sub> = 400, T <sub>j</sub> = 25°C V <sub>R</sub> = 600, T <sub>j</sub> = 25°C V <sub>R</sub> = 800, T <sub>j</sub> = 25°C V <sub>R</sub> = 1000, T <sub>j</sub> = 25°C	I <sub>R</sub>		5	μA
Reverse Current V <sub>R</sub> = 200, T <sub>j</sub> = 150°C V <sub>R</sub> = 400, T <sub>j</sub> = 150°C V <sub>R</sub> = 600, T <sub>j</sub> = 150°C V <sub>R</sub> = 800, T <sub>j</sub> = 150°C V <sub>R</sub> = 1000, T <sub>j</sub> = 150°C	I <sub>R</sub>		200	μA

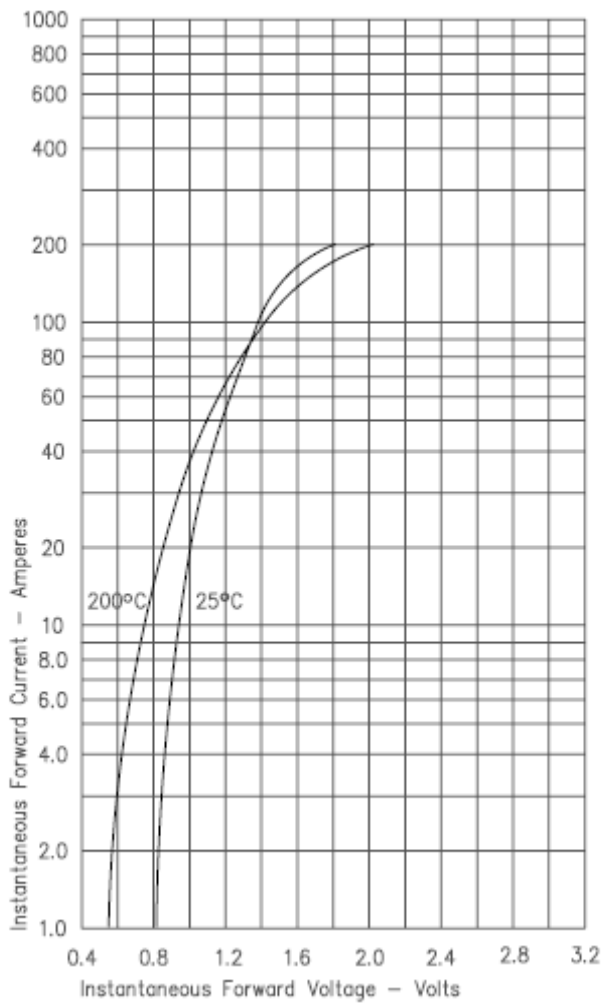
\* Pulse test: Pulse width 300 μsec, Duty cycle 2%

**Note:**

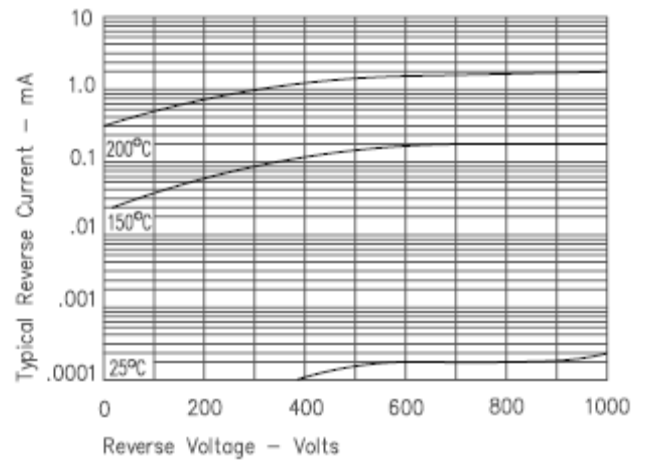
## HIGH RELIABILITY POWER RECTIFIER

### ▶ GRAPHS

**FIGURE 1**  
**TYPICAL FORWARD CHARACTERISTICS**

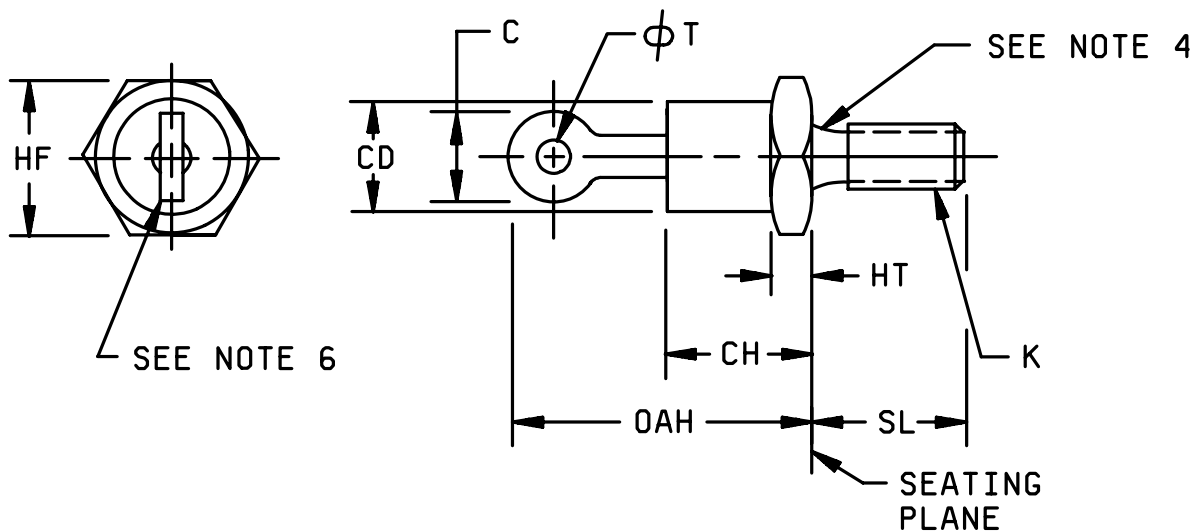


**FIGURE 2**  
**TYPICAL REVERSE CHARACTERISTICS**



## HIGH RELIABILITY POWER RECTIFIER

### PACKAGE DIMENSIONS



#### NOTES:

- Dimensions are in inches.
- Millimeters are given for general information only.
- Units must not be damaged by torque of 15 inch-pounds applied to 10-32NF-2B nut assembled on thread
- Diameter of unthreaded portion .189 inch (4.80 mm) max and .163 inch (4.14 mm) min.
- Complete threads to extend to within 2.5 threads of seating plane.
- Angular orientation of this terminal is undefined.
- 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.)
- The A.S.A. thread reference is 10-32UNF2A.
- Terminal shape is unrestricted.
- Reversed (anode to stud) units shall be marked with an R following the last digit in the type number
- In accordance with ASME Y14.5M, diameters are equivalent to  $\phi$ 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
$\phi$ 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.