

**HIGH-RELIABILITY PRODUCTS**
**Features**

- $V_{RWM} = 40V$
- $I_R = 0.10mA$
- $V_F = 0.50V$  at  $I_F = 3.0A$
- Hard glass hermetically sealed
- Metallurgically bonded
- Double plug construction
- Axial leaded for through-hole mounting

**Description**

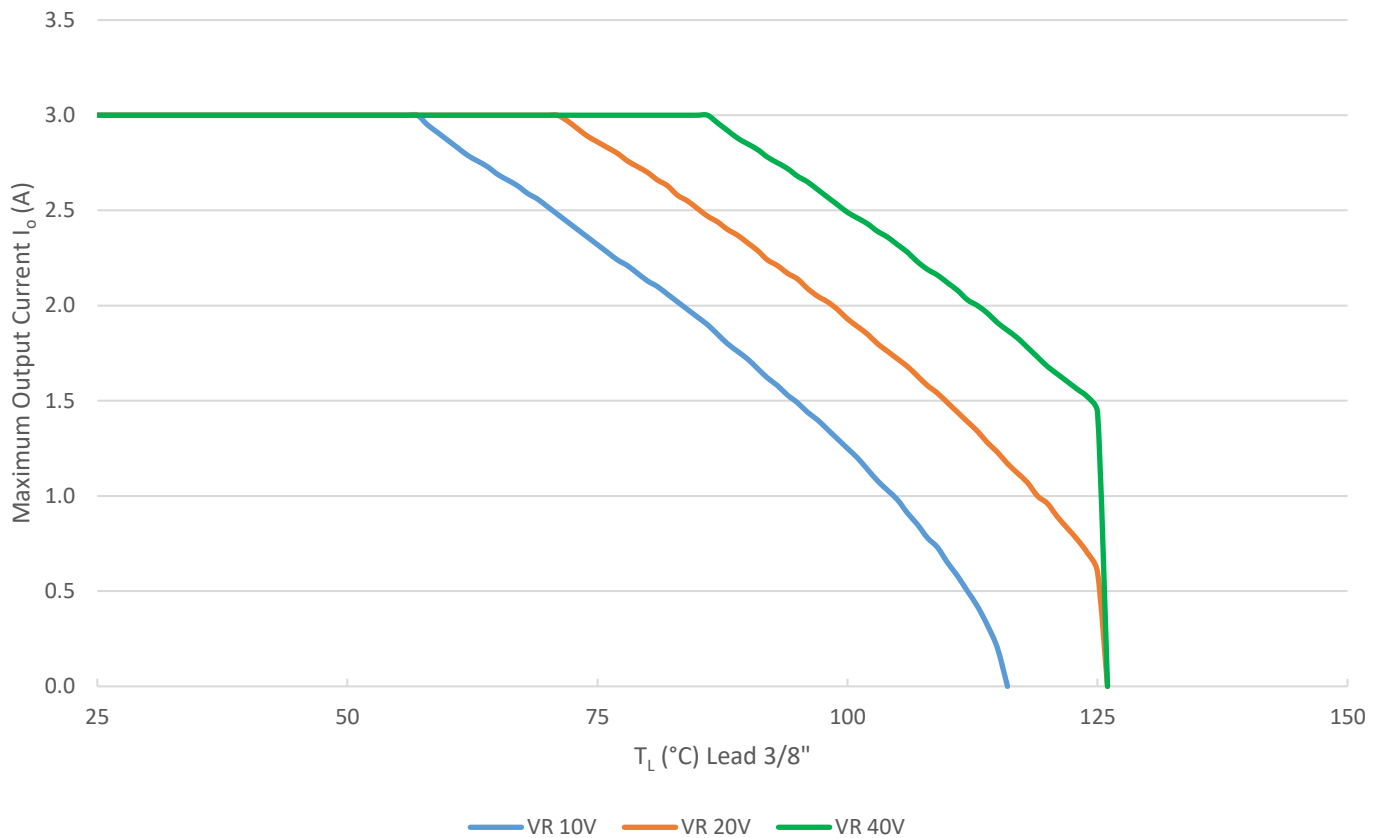
1N5822 is an axial leaded Schottky rectifier rated 40V, 3A.

This product is qualified to MIL-PRF-19500/620 and can be supplied as JAN, JANTX and JANTXV versions.

**Absolute Maximum Ratings  $T_A = 25\text{ }^\circ\text{C}$  unless otherwise specified.**

	Symbol	1N5822	Units
Working Reverse Voltage	$V_{RWM}$	40	V
Maximum Forward Voltage	$V_{FM1}$ @ 1.0A	0.40	V
	$V_{FM2}$ @ 3.0A	0.50	V
	$V_{FM3}$ @ 9.4A	0.70	V
Maximum Reverse Leakage Current	$I_{RM}$ @ 40V	0.10	mA
Junction Temperature	$T_J$	-65 to +125	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance Junction to Lead 0.375" Lead Length	$R_{\theta JL}$	30	$^\circ\text{C/W}$
Surge Peak Forward Current @ $T_A = 25\text{ }^\circ\text{C}$ (Test Pulse = 8.3ms)	$I_{FSM}$	80	A(pk)
Thermal Impedance	$Z_{\theta JX}$	2.5	$^\circ\text{C/W}$
Average Rectified Output Current @ $T_L = 25\text{ }^\circ\text{C}$	$I_o$	3	A

## Temperature - Current Derating Curve

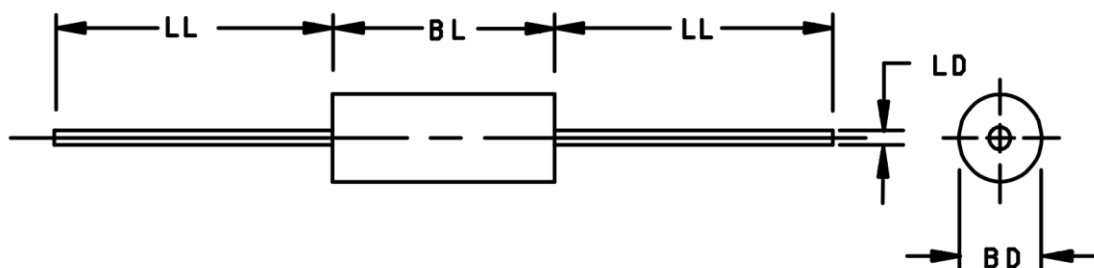


Sinewave operating 50% duty cycle  
Thermal Resistance Junction to Lead 3/8" = 30.0 °C/W

### Notes:

1. This is the true inverse of the worst case thermal resistance value. All devices are capable of operating  $\leq T_J$  specified on this curve. Any parallel line to this curve will intersect the appropriate power for the desired maximum  $T_J$  allowed.
2. This temperature-current derating curve varies with applied voltage.

## Outline Drawing



Dimensions				
Symbol	Inches		Millimeters	
	Min	Max	Min	Max
BD	.115	.145	2.92	3.68
BL	.130	.195	3.30	4.95
LD	.036	.042	0.91	1.07
LL	.900	1.300	22.86	33.02

### Notes:

1. Dimensions are in inches. Millimeters are given for information only
2. Dimensions are pre-solder dip
3. In accordance with ASME Y14.5M, diameters are equivalent to  $\phi_x$  symbology
4. Terminal finish: 63/37 solder. Consult factory for SAC finish



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