

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

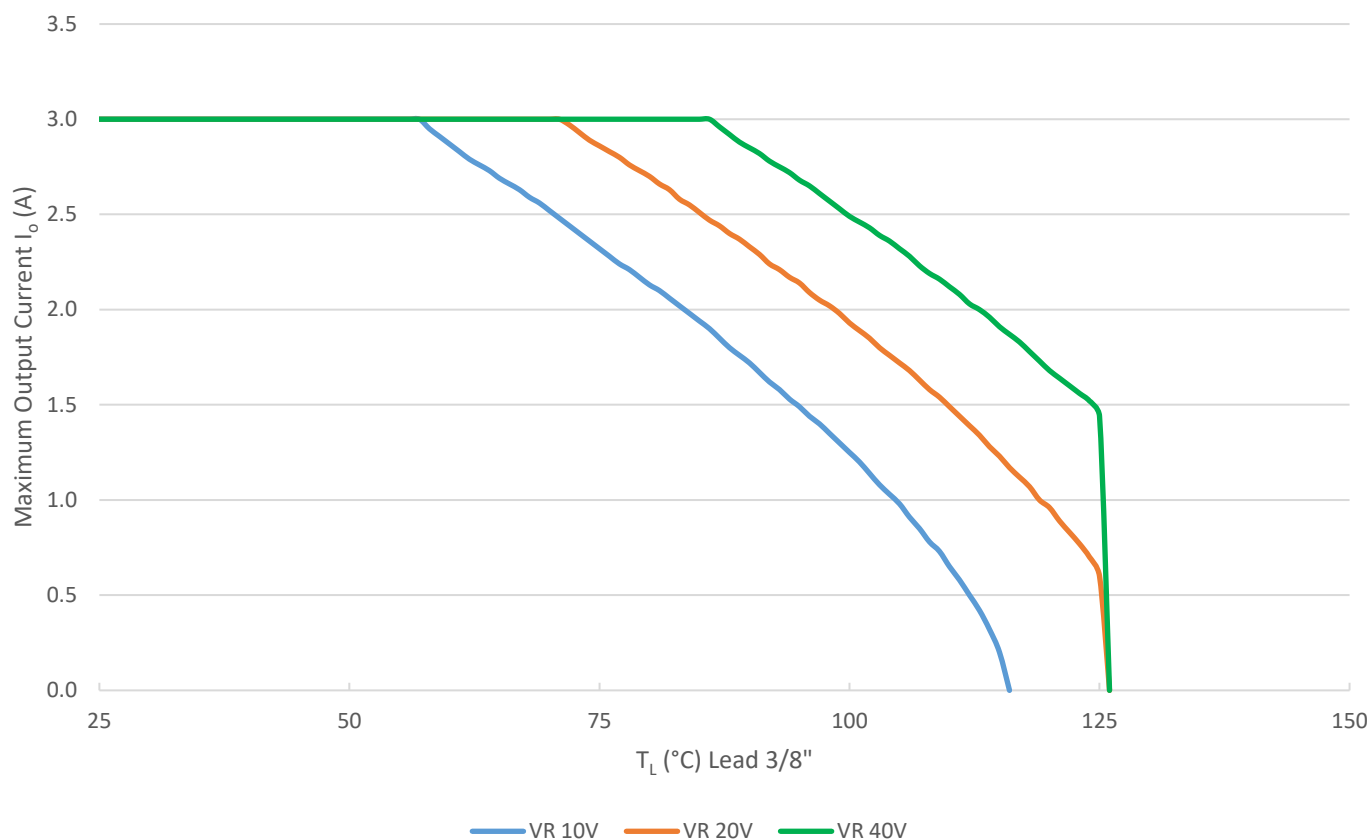
Description

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 V_{FM2} @ 3.0A V_{FM3} @ 9.4A	0.40 0.50 0.70	V V 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

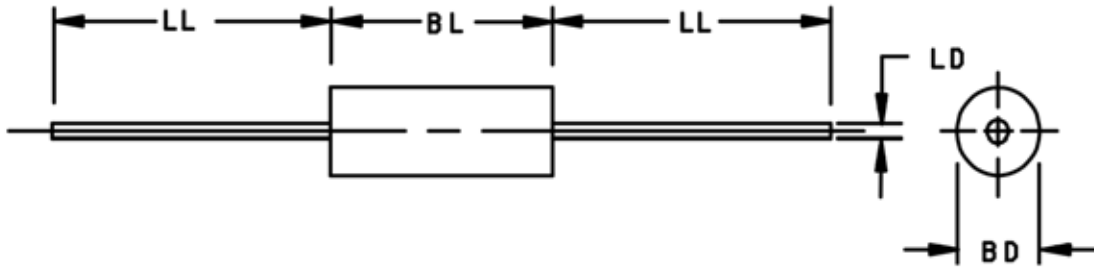


Sinewave operating 50% duty cycle
Thermal Resistance Junction to Lead 3/8" = 30.0 °C/W

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 ϕ x symbology
4. Terminal finish: 63/37 solder. Consult factory for SAC finish