

Silicon Switching Diodes

1N4150UR, 1N4150UR-1 & 1N3600UR

Features

- Available in JAN, JANTX, and JANTXV per MIL-PRF-19500/231
- Metallurgically Bonded
- Hermetically Sealed
- Double Plug Construction

Maximum Ratings

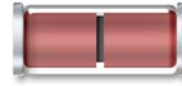
Operating & Storage Temperature: -65 °C to +175 °C

Operating Current: 300 mA @ TA = +25 °C

Derating: 2.0 mA dc/°C Above TL = + 75 °C @ L = 3/8"

Surge Current A: 2A (pk) $t_p = 8.3$ ms, $V_{RM} = 0$

Surge Current B: 4A (pk) $t_p = 1$ us, $V_{RM} = 0$



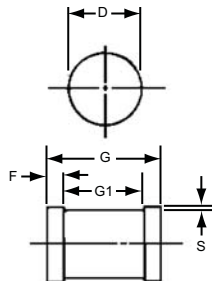
Electrical Specifications @ +25 °C (Unless Otherwise Specified)

TYPE Number	V_{BR} $I_R = 10 \mu A$	V_{RWM}	I_{R1} $V_R = 50$ Vdc $T_A = 25$ °C	I_{R2} $V_R = 50$ Vdc $T_A = 150$ °C	C $I_R = 0$; $f = 1$ MHz ac signal = 50 mV (p-p)	T_{rr} $I_F = I_R = 10$ to 100 mA dc $R_L = 100 \Omega$
	V dc	V (pk)	μA dc	μA dc	pF	ns
1N3600UR	75	50	0.1	100	2.5	4.0
1N4150UR, -1	75	50	0.1	100	2.5	4.0

Forward Voltage Limits - All Types

Limits	V_{F1} $I_F = 1$ mA dc	V_{F2} $I_F = 10$ mA dc	V_{F3} $I_F = 50$ mA dc (Pulsed)	V_{F4} $I_F = 100$ mA dc (Pulsed)	V_{F5} $I_F = 200$ mA dc (Pulsed)
	V dc	V dc	V dc	V dc	V dc
minimum	0.540	0.660	0.760	0.820	0.870
maximum	0.620	0.740	0.860	0.920	1.000

Outline Drawing



	MILLIMETERS		INCHES	
DIM	MIN	MAX	MIN	MAX
D	1.60	1.70	0.063	0.067
F	0.41	0.55	0.016	0.022
G	3.30	3.70	.130	.146
G1	2.54 REF.		.100 REF.	
S	0.03 MIN.		.001 MIN.	

LEADED DESIGN DATA

CASE: DO – 213AA, Hermetically sealed glass case.
(MELF, SOD-80, LL34)

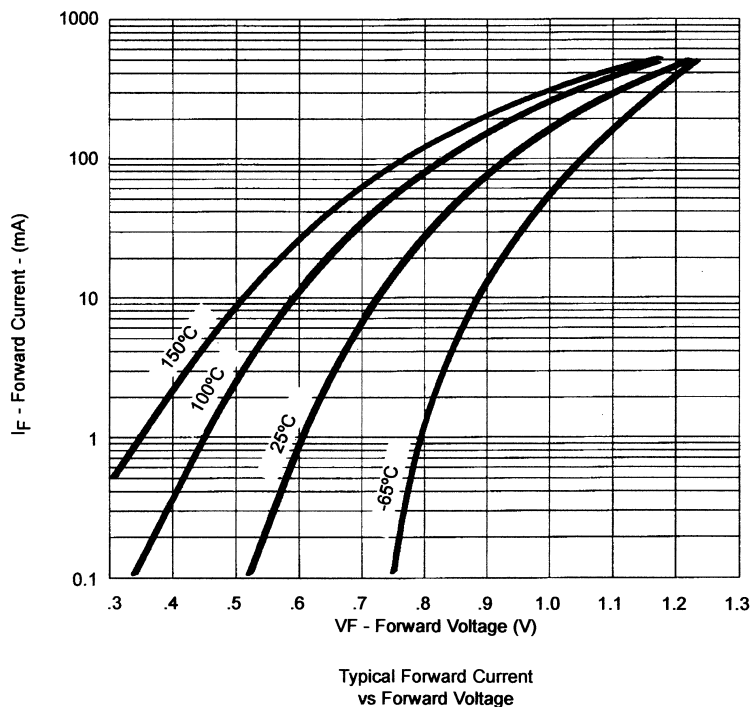
LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: ($R_{\theta JEC}$): 100 °C/W maximum

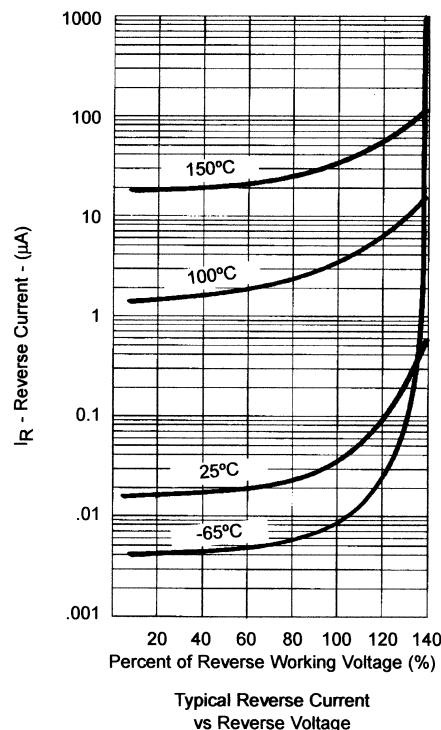
THERMAL IMPEDANCE: ($Z_{\theta JX}$): 70 °C/W maximum

POLARITY: Cathode end is banded.

Graphs



NOTE : All temperatures shown on graphs are junction temperatures



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