

- 1N4148UR-1 AVAILABLE IN JAN, JANTX, AND JANTXV
PER MIL-PRF-19500/116
- SWITCHING DIODE
- HERMETICALLY SEALED
- METALLURGICALLY BONDED
- DOUBLE PLUG CONSTRUCTION

1N4148UR-1 and CDLL4148

MAXIMUM RATINGS

Operating Temperature: -65°C to +200°C
 Storage Temperature: -65°C to +200°C
 Operating Current: 200 mA @ $T_A = +25^\circ\text{C}$
 Derating Factor: 1.14 mA/°C Above $T_A = +25^\circ\text{C}$
 Surge Current A: 2A, sine wave, $P_W = 8.3\text{ms}$
 Surge Current B: 1.41A, square wave, $P_W = 8.3\text{ms}$

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified

V_{BR} @100 μA	V_{RWM}	I_0	V_{f1} @ $I_F = 10\text{ mA}$	V_{f2} @ $I_F = 100\text{ mA}$	t_{rr} (Note 1)
Volts	Volts (pk)	mA	V dc	V dc	n sec
100	75	200	0.8	1.2	5

I_{R1} @ 20 V dc	I_{R2} @ 75 V dc	I_{R3} @ 20 V $T_A = 150^\circ\text{C}$	I_{R4} @ 75 V $T_A = 150^\circ\text{C}$	CAPACITANCE @ 0 V	CAPACITANCE @ 1.5 V
nA	μA	μA	μA	pF	pF
25	0.5	35	75	4.0	2.8

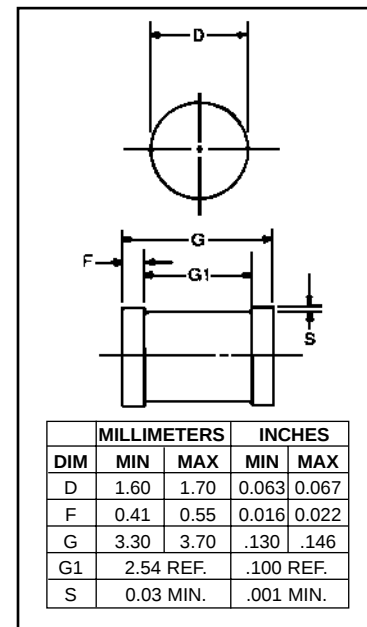


FIGURE 1
DESIGN DATA

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

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE ($R_{\theta JEC}$):
100 °C/W maximum AT L = 0

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

POLARITY: Cathode end is banded.

MOUNTING SURFACE SELECTION:
The Axial Coefficient of Expansion (COE) Of this Device is Approximately +6PPM/°C. The COE of the Mounting Surface System Should Be Selected To Provide A Suitable Match With This Device.



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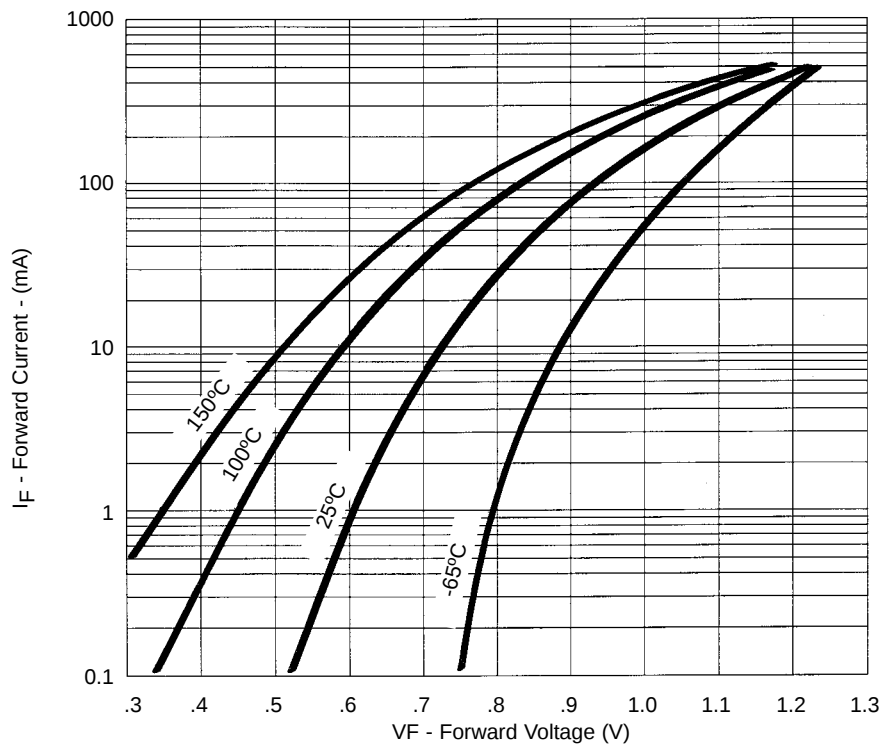
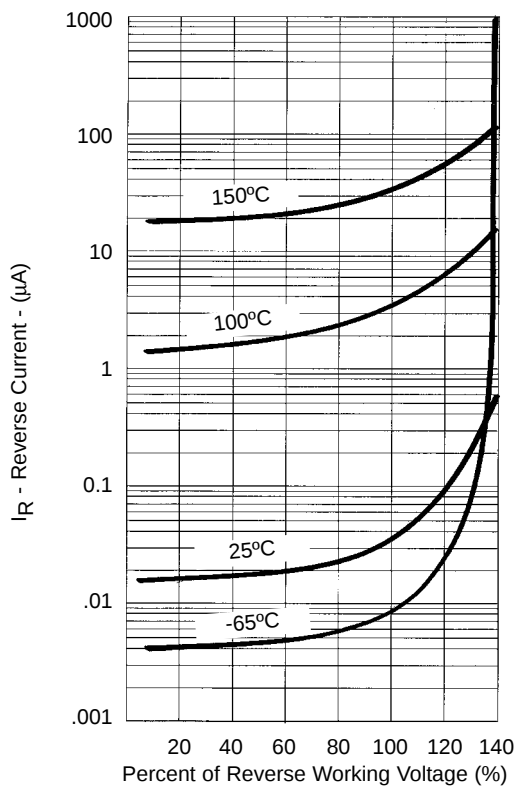


FIGURE 2
Typical Forward Current
vs Forward Voltage



NOTE : All temperatures shown on graphs are junction temperatures

FIGURE 3
Typical Reverse Current
vs Reverse Voltage