

- 1N4150UR-1 AVAILABLE IN JAN, JANTX, AND JANTXV PER MIL-PRF-19500/231
- SWITCHING DIODE
- HERMETICALLY SEALED
- METALLURGICALLY BONDED
- DOUBLE PLUG CONSTRUCTION

1N4150UR-1
1N3600UR
CDLL4150
CDLL3600

MAXIMUM RATINGS

Junction Temperature: -65°C to +175°C
Storage Temperature: -65°C to +175°C
Operating Current: 300 mA @ $T_A = +25^\circ\text{C}$
Derating: 3.1 mA dc/°C Above $T_{EC} = +110^\circ\text{C}$
Forward Surge Current: 4A, ($t_p = 1\mu\text{s}$); 0.5A ($t_p = 1\text{s}$)

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

| Type | V_{BR} | V_{RWM} | I_{R1} | I_{R2} | C | t_{rr} |
|-------------|------------------------|-----------|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------|
| | $I_R = 10 \mu\text{A}$ | | $V_R = 50 \text{ V dc}$ $T_A = 25^\circ\text{C}$ | $V_R = 50 \text{ V dc}$ $T_A = 150^\circ\text{C}$ | $V_R = 0; f = 1 \text{ Mhz};$ ac signals = 50 m V (p-p) | $I_F = I_R = 10 \text{ to } 100 \text{ mA dc}$ $R_L = 100 \text{ ohms}$ |
| | V dc | V (pk) | $\mu\text{A dc}$ | $\mu\text{A dc}$ | pF | ns |
| CDLL3600 | 75 | 50 | 0.1 | 100 | 2.5 | 4 |
| CDLL4150,-1 | 75 | 50 | 0.1 | 100 | 2.5 | 4 |

FORWARD VOLTAGE LIMITS – ALL TYPES

| Limits | V_{F1} | V_{F2} | V_{F3} | V_{F4} | V_{F5} |
|---------|-------------------------|--------------------------|--------------------------------------|---------------------------------------|---------------------------------------|
| | $I_F = 1 \text{ mA dc}$ | $I_F = 10 \text{ mA dc}$ | $I_F = 50 \text{ mA dc}$ (Pulsed) | $I_F = 100 \text{ mA dc}$ (Pulsed) | $I_F = 200 \text{ mA dc}$ (Pulsed) |
| | V dc | V dc | V dc | V dc | V dc |
| minimum | 0.540 | 0.680 | 0.780 | 0.820 | 0.870 |
| maximum | 0.620 | 0.740 | 0.860 | 0.920 | 1.000 |

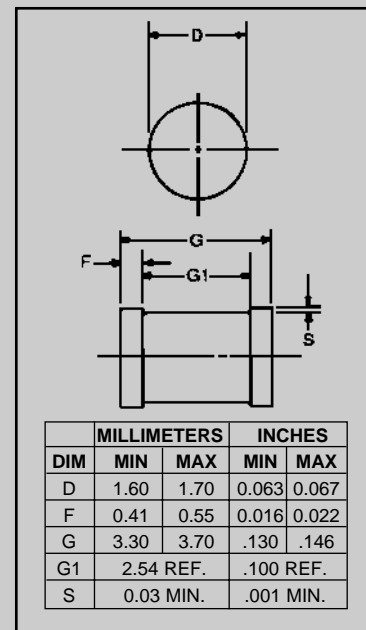


FIGURE 1

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.



IN4150UR-1, IN3600UR-1, CDLL4150 and CDLL3600

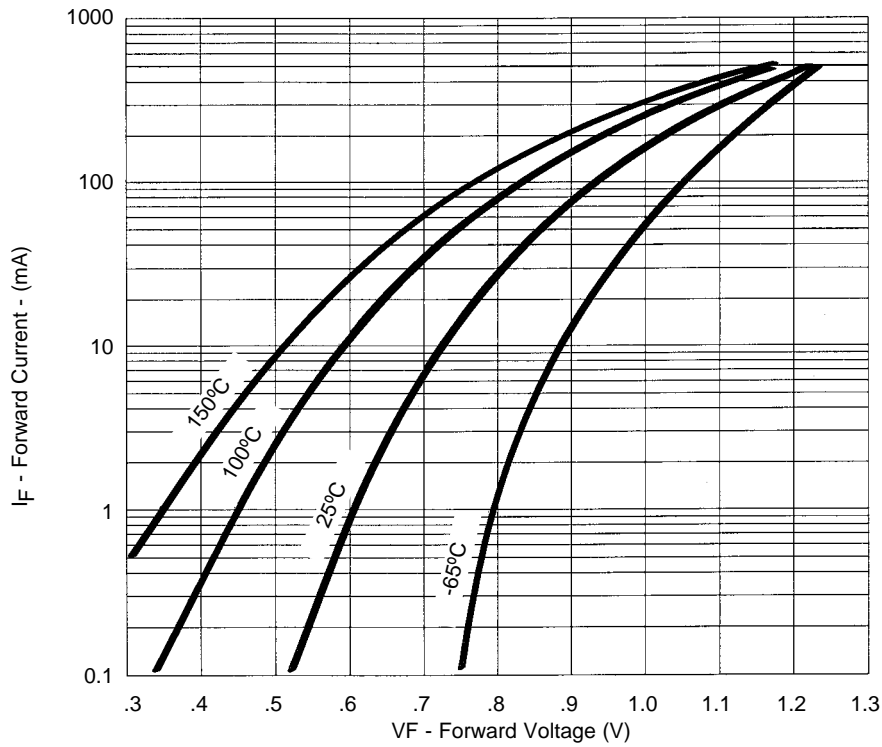
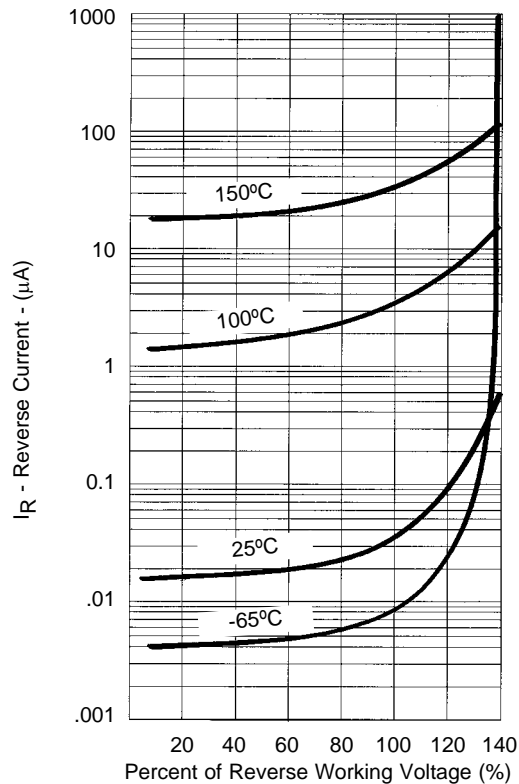


FIGURE 2
Typical Forward Current
vs Forward Voltage



NOTE : All temperatures shown on graphs are junction temperatures

FIGURE 3
Typical Reverse Current
vs Reverse Voltage