

- 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, (tp = 1μs); 0.5A (tp = 1s)

### 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)	μA dc	μA 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

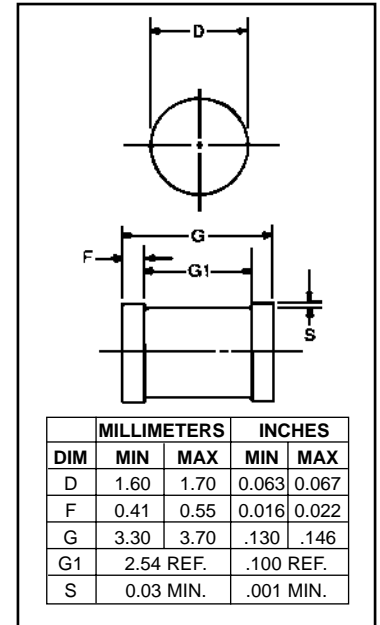


FIGURE 1

### 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.

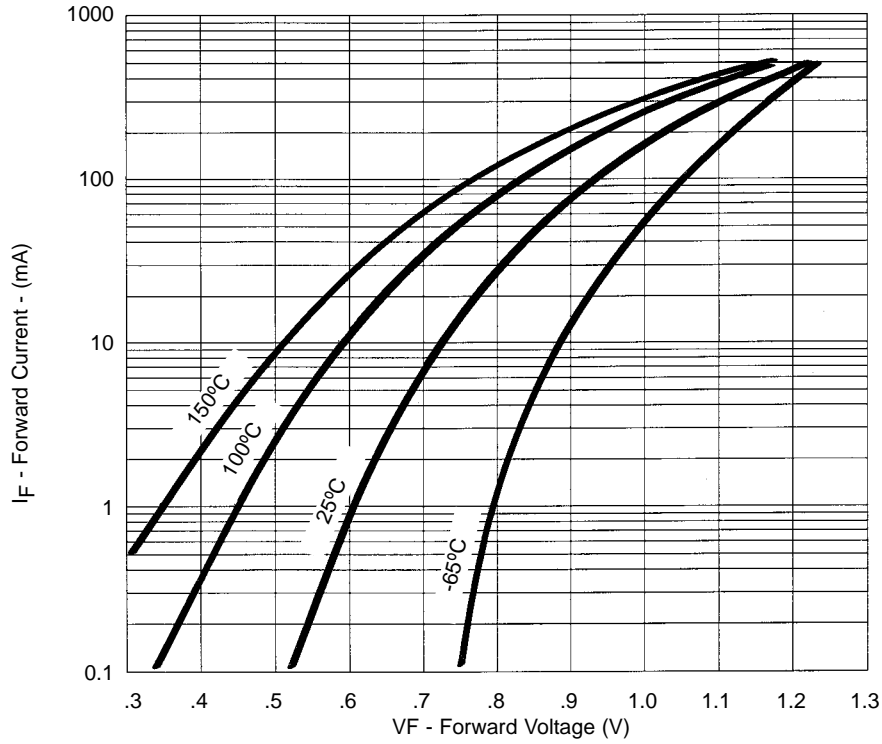
**MOUNTING SURFACE SELECTION:**  
The Axial Coefficient of Expansion (COE) of this Device is Approximately +6PPM/°C. The COE of the Mounting Surface System Should Be Selected To Provide A Suitable Match With This Device.



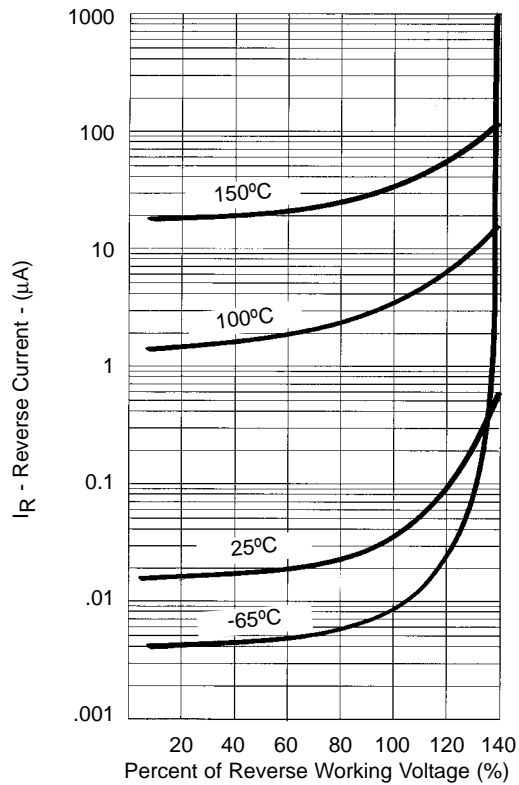
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# IN4150UR-1, IN3600UR-1, CDLL4150 and CDLL3600



**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