

- 1N4454UR and 4454UR-1 AVAILABLE IN JAN, JANTX, AND JANTXV PER MIL-PRF-19500/144
- SWITCHING DIODE
- HERMETICALLY SEALED
- METALLURGICALLY BONDED
- DOUBLE PLUG CONSTRUCTION

**1N4454UR  
1N4454UR-1  
and  
CDLL4454**

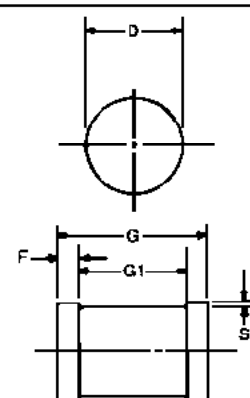
### MAXIMUM RATINGS

Junction Temperature: -55°C to +175°C  
 Storage Temperature: -55°C to +175°C  
 Operating Current: 200 mA @  $T_A = +25^\circ\text{C}$   
 Derating Factor: 1.33 mA/°C Above  $T_A = +25^\circ\text{C}$   
 Surge Current A: 1A (pk),  $P_W = 1$  sec  
 Surge Current B: 4A (pk),  $P_W = 1$   $\mu\text{s}$

### ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified

$V_{BR}$ @5 $\mu\text{A}$	$V_{RWM}$	$I_0$	$V_{f1}$ @ $I_F = 10$ mA	$V_{f2}$ @ $I_F = 10$ mA $T_A = 150^\circ\text{C}$	$t_{rr}$
Volts	Volts (pk)	mA	V dc	V dc	n sec
75	50	200	1.0	0.7	4

$I_{R1}$ @ 50 V dc	$I_{R2}$ @ 50 V $T_A = 150^\circ\text{C}$	CAPACITANCE @ 0 V
$\mu\text{A}$	$\mu\text{A}$	pF
0.1	100	2.0



DIM	MILLIMETERS		INCHES	
	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.	

**FIGURE 1  
DESIGN DATA**

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

**LEAD FINISH:** Tin / Lead

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

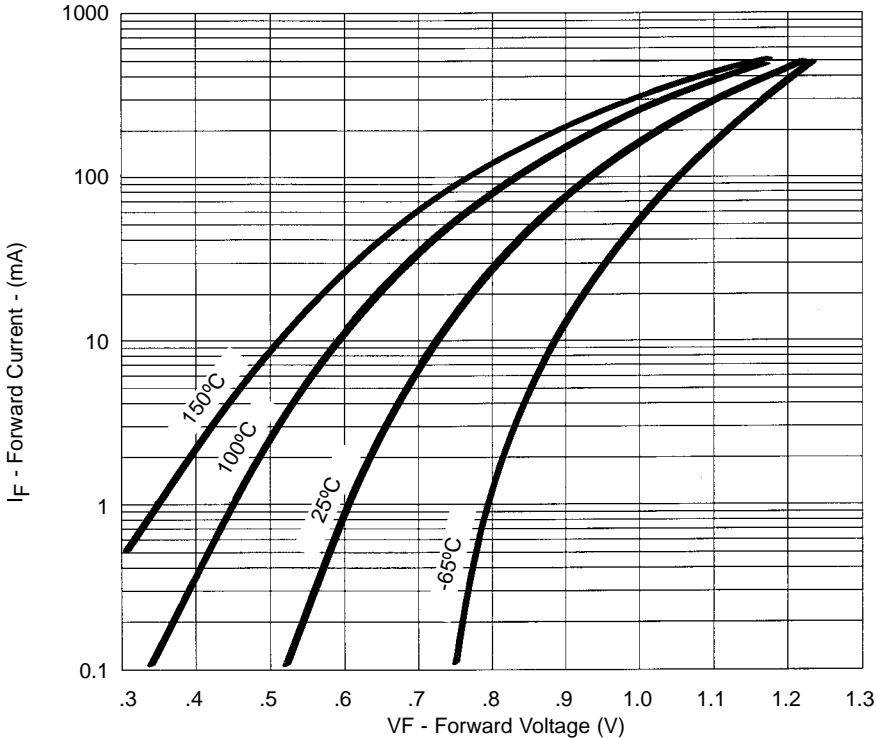
**THERMAL IMPEDANCE: ( $Z_{\theta JX}$ ):** 70 °C/W maximum

**POLARITY:** Cathode end is banded.

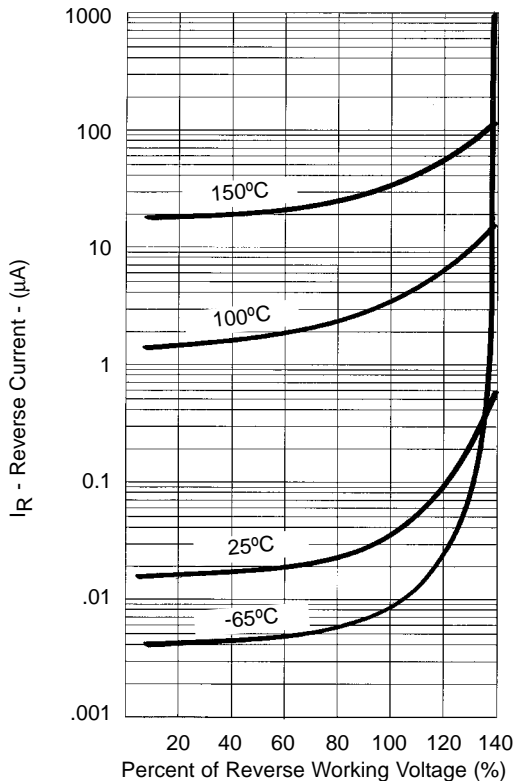
**MOUNTING SURFACE SELECTION:**  
 The Axial Coefficient of Expansion (COE) Of this Device is Approximately +6PPM/°C. The COE of the Mounting Surface System Should Be Selected To Provide A Suitable Match With This Device.



# IN4454UR-1 and CDLL4454



**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