

- 1N4153UR-1 AVAILABLE IN JAN, JANTX, AND JANTXV
PER MIL-PRF-19500/337
- SWITCHING DIODE
- HERMETICALLY SEALED
- METALLURGICALLY BONDED
- DOUBLE PLUG CONSTRUCTION

**1N4153UR-1
CDLL4153**

MAXIMUM RATINGS

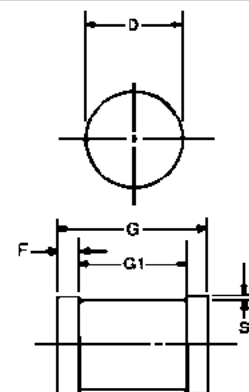
Junction Temperature: -65°C to +175°C
 Storage Temperature: -65°C to +175°C
 Operating Current: 150 mA @ $T_A = +25^\circ\text{C}$
 Derating: 1.0 mA/°C Above $T_A = +25^\circ\text{C}$
 Forward Surge Current: 2A (pk), (tp = 1μs); 0.25A (pk), (tp = 1s)

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

Type	V_{BR} $I_R = 5 \mu\text{A}$	V_{RWM}	I_{R1} $V_R = 50 \text{ V dc}$ $T_A = 25^\circ\text{C}$	I_{R2} $V_R = 50 \text{ V dc}$ $T_A = 150^\circ\text{C}$	C $V_R = 0$; $f = 1 \text{ Mhz}$	t_{rr}
	V dc	V (pk)	nA dc	μA dc	pF	ns
4153UR-1 CDLL4153	75 75	50 50	50 50	50 50	2.0 2.0	4 4

FORWARD VOLTAGE LIMITS – ALL TYPES

Limits	V_{F1} $I_F = 100 \mu\text{A dc}$	V_{F2} $I_F = 250 \mu\text{A dc}$	V_{F3} $I_F = 1 \text{ mA dc}$	V_{F4} $I_F = 2 \text{ mA dc}$	V_{F5} $I_F = 10 \text{ mA dc}$	V_{F6} $I_F = 20 \text{ mA dc}$
	V dc	V dc	V dc	V dc	V dc	V dc
minimum	0.49	0.53	0.59	0.62	0.70	0.74
maximum	0.55	0.59	0.67	0.70	0.81	0.88



	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.	

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.



6 LAKE STREET, LAWRENCE, MASSACHUSETTS 01841
 PHONE (978) 620-2600
 WEBSITE: <http://www.microsemi.com>

FAX (781) 689-0803

IN4153UR-1 and CDLL4153

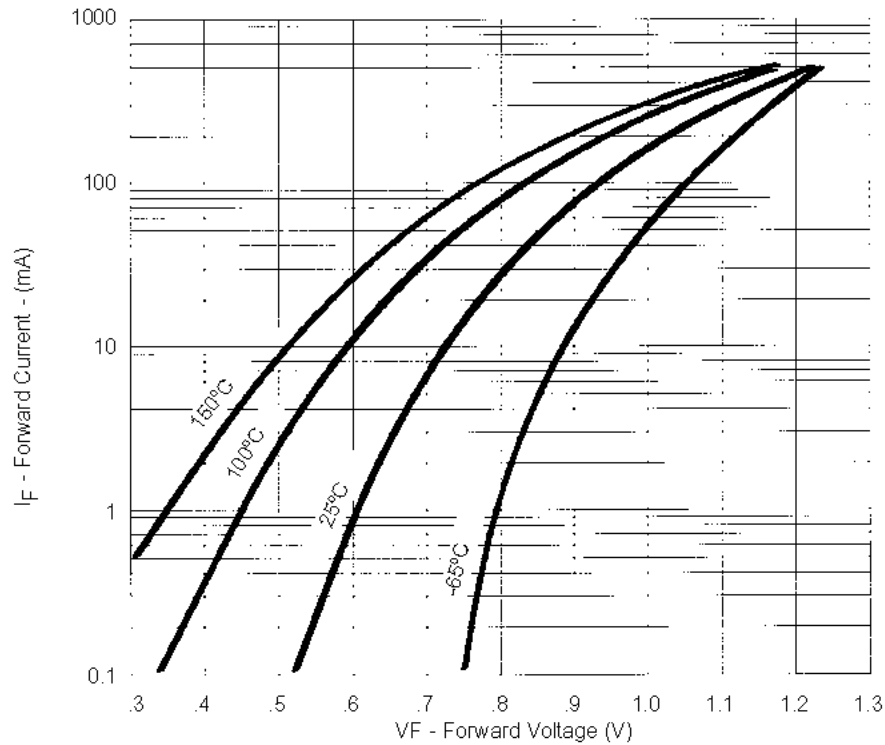


FIGURE 2
Typical Forward Current
vs Forward Voltage

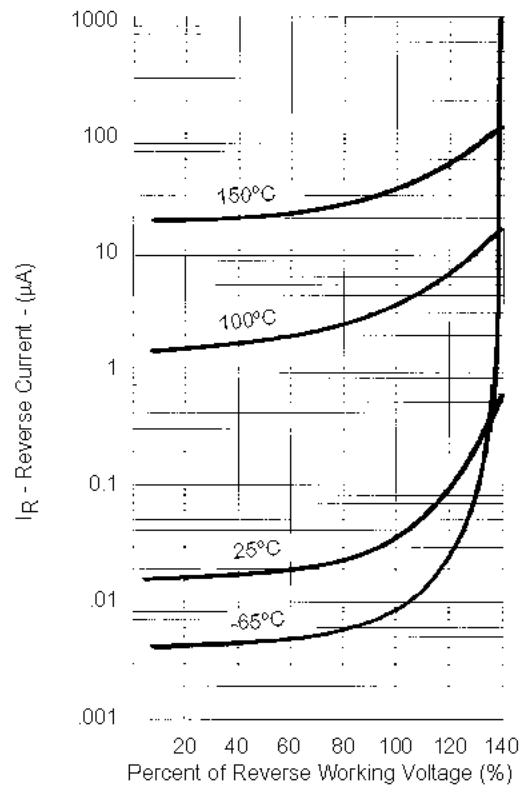


FIGURE 3
Typical Reverse Current
vs Reverse Voltage

NOTE : All temperatures shown on graphs are junction temperatures