

- 1N4153 and 1N4153-1 AVAILABLE IN JAN, JANTX, AND JANTXV
PER MIL-PRF-19500/337
- SWITCHING DIODES
- HERMETICALLY SEALED
- METALLURGICALLY BONDED
- DOUBLE PLUG CONSTRUCTION

1N4153 and 1N4153-1

MAXIMUM RATINGS

Junction Temperature: -85°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 $^\circ\text{C}$ 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 dc	V_{RWM} V (pk)	I_{R1} $V_R = 50 \text{ V dc}$ $T_A = 25^\circ\text{C}$ nA dc	I_{R2} $V_R = 50 \text{ V dc}$ $T_A = 150^\circ\text{C}$ μA dc	C $V_R = 0$; f = 1 Mhz; pF	t_{rr} $I_F = I_R = 10 \text{ mA dc}$ $R_L = 100 \text{ ohms}$ ns
1N4153-1	75	50	50	50	2.0	4

FORWARD VOLTAGE LIMITS – ALL TYPES

Limits	V_{F1} $I_F = 100 \mu\text{A dc}$ V dc	V_{F2} $I_F = 250 \mu\text{A dc}$ V dc	V_{F3} $I_F = 1 \text{ mA dc}$ V dc	V_{F4} $I_F = 2 \text{ mA dc}$ V dc	V_{F5} $I_F = 10 \text{ mA dc}$ V dc	V_{F6} $I_F = 20 \text{ mA dc}$ 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

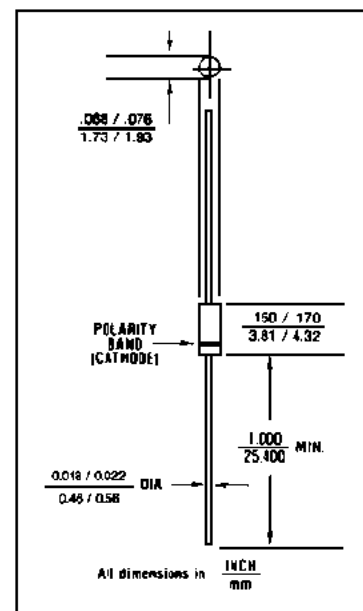


FIGURE 1

DESIGN DATA

CASE: Hermetically sealed
 glass case per MIL-S-19500/337
 D0-35 outline

LEAD MATERIAL: Copper clad steel.

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: ($R_{\theta JL}$):
 250 $^\circ\text{C/W}$ maximum at L = .375

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

POLARITY: Cathode end is banded.

MOUNTING POSITION: Any.



IN4153 and IN4153-1

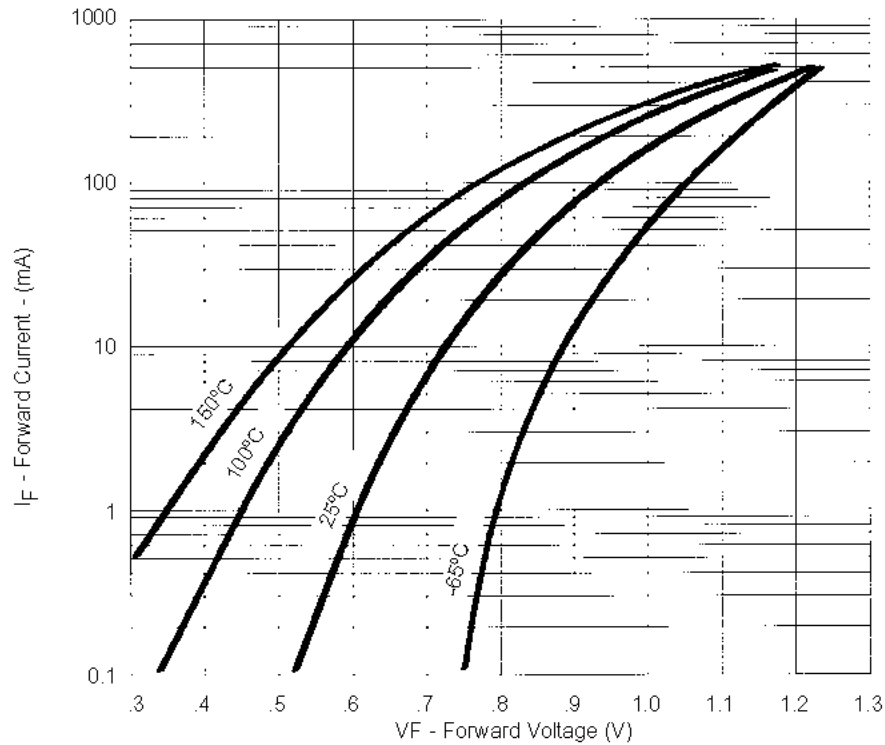
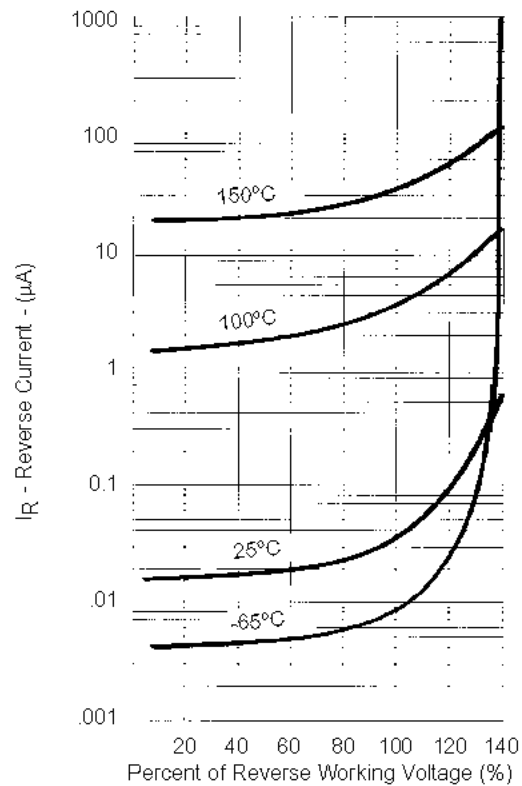


FIGURE 2
Typical Forward Current
vs Forward Voltage



NOTE : All temperatures shown on graphs are junction temperatures

FIGURE 3
Typical Reverse Current
vs Reverse Voltage