

1N4151 1N4154

Features

- Planar Passivated
- Metallurgically bonded Construction
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant.)

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +200°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

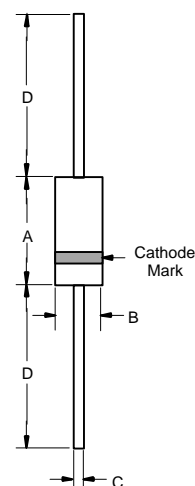
Reverse Voltage 1N4151 1N4154	V_R	50V 25V	
Peak Reverse Voltage 1N4151 1N4154	V_{RM}	75V 35V	
Average Rectifier Current	I_o	150mA	Resistive Load $f \geq 50\text{Hz}$
Power Dissipation	P_{TOT}	500mW	
Junction Temperature	T_J	200°C	
Peak Forward Surge Current 1N4151 1N4154	I_{FSM}	50mA 30mA	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.0V	$I_F = 30\text{mA}$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage 1N4151 1N4154	I_R	0.05uA 0.1uA	$T_A = 25^\circ\text{C}$ $V_{R1} = 50\text{V}$ $V_{R2} = 25\text{V}$
Typical Junction Capacitance 1N4151 1N4154	C_J	2.0pF 4.0pF	Measured at 1.0MHz, $V_R = 4.0\text{V}$
Maximum Reverse Recovery Time	T_{rr}	2.0nS	$I_F = 10\text{mA}$ $V_R = 6\text{V}$ $R_L = 100\text{ohm}$

*Pulse test: Pulse width 300 sec, Duty cycle 2%

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.

500mW Silicon Switching Diode

DO-35

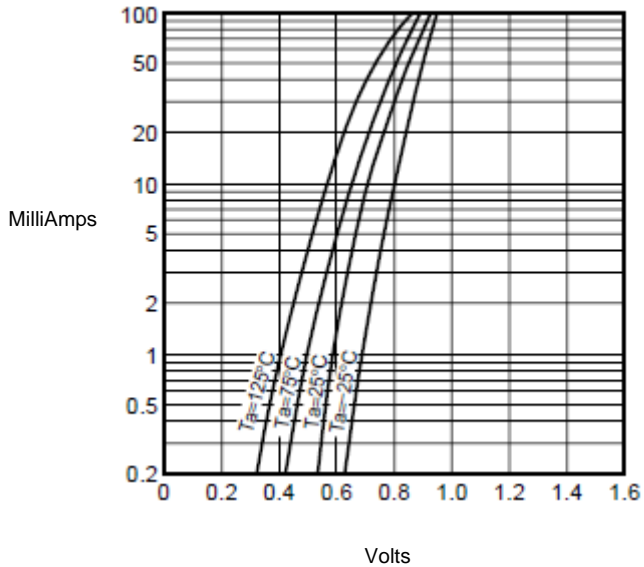


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	-----	0.166	-----	4.20	
B	-----	0.079	-----	2.00	
C	-----	0.020	-----	0.52	
D	1.000	-----	25.40	-----	



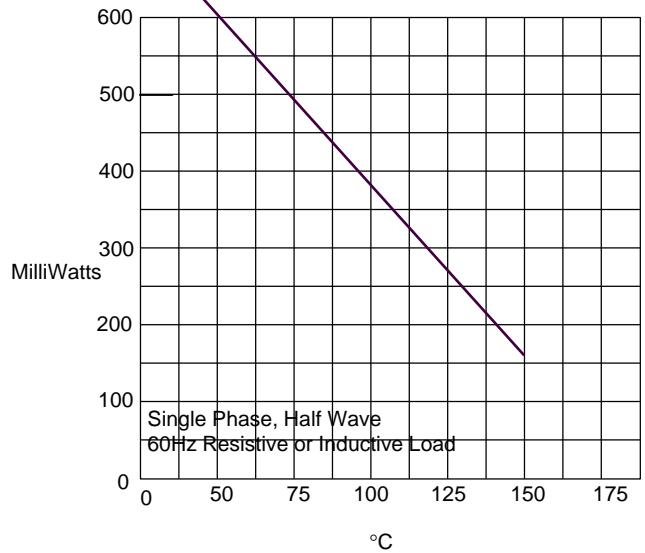
1N4151 thru 1N4154

Figure 1
Typical Forward Characteristics



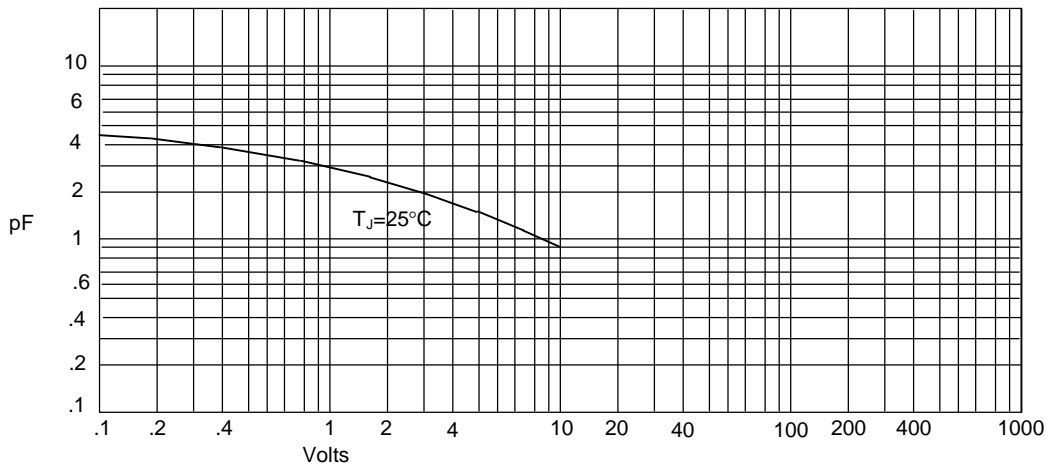
Instantaneous Forward Current - MilliAmperes versus Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Admissible Power Dissipation - MilliWatts versus Ambient Temperature - °C

Figure 3
Junction Capacitance

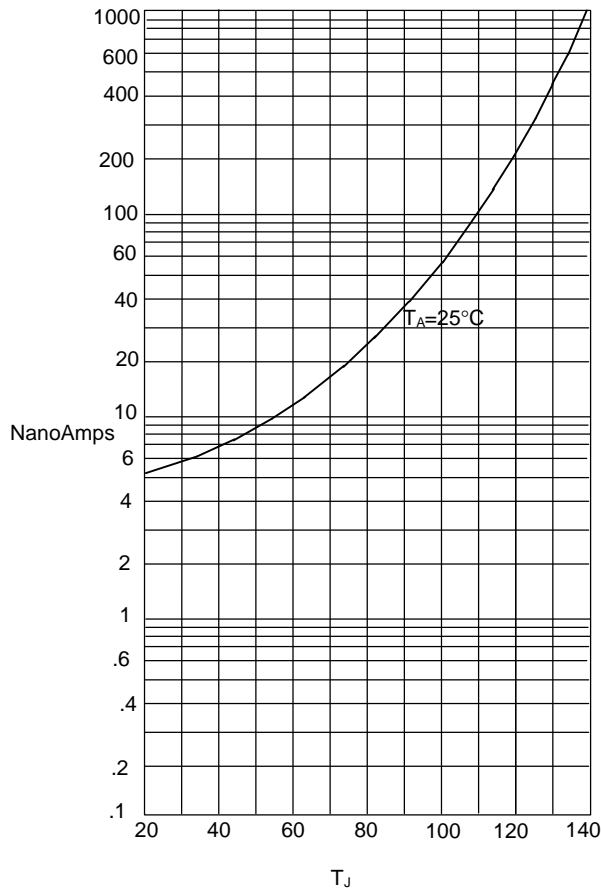


Junction Capacitance - pF versus Reverse Voltage - Volts



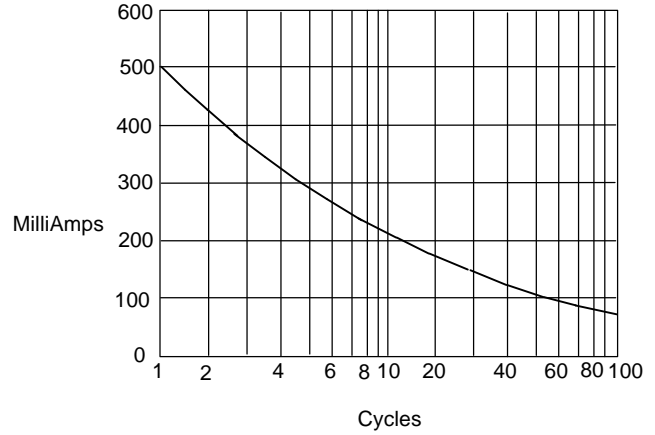
1N4151 thru 1N4154

Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - NanoAmperes versus
Junction Temperature - °C

Figure 5
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles