

# 1N4151

## FAST SWITCHING SURFACE MOUNT DIODES

**VOLTAGE**
**75 Volt**
**POWER**
**500 mW**
**DO-35**

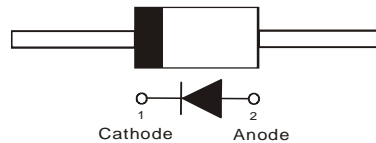
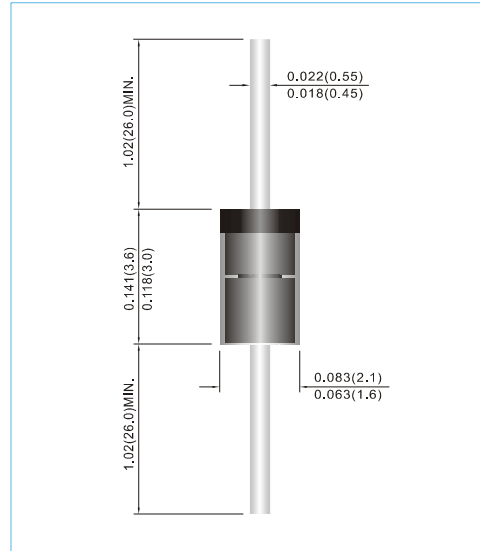
Unit : inch(mm)

### FEATURES

- Fast switching Speed.
- Surface Mount Package Ideally Suited For Automatic Insertion.
- Silicon Epitaxial Planar Construction.
- Lead free in compliance with EU RoHS 2011/65/EU directive

### MECHANICAL DATA

- Case : Molded Glass DO-35
- Terminals : Solderable per MIL-STD-750, Method 2026
- Packing information
  - B/P - 2K per Bulk box
  - T/R - 10K per 15" Reel
  - T/B - 5K per horiz. tape & Ammo box



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
Peak Reverse Voltage	V <sub>RM</sub>	75	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	V
Maximum Average Forward Current at T <sub>A</sub> =25°C And f ≥ 50Hz	I <sub>F(AV)</sub>	150	mA
Surge Forward Current at t < 1s and T <sub>J</sub> =25°C	I <sub>FSM</sub>	500	mA
Power Dissipation at T <sub>A</sub> = 25°C	P <sub>TOT</sub>	500	mW
Maximum Forward Voltage at I <sub>F</sub> =50mA	V <sub>F</sub>	1	V
Maximum Leakage Current at V <sub>R</sub> =50V at V <sub>R</sub> =50V ,T <sub>J</sub> = 150°C	I <sub>R</sub>	50 50	nA μA
Maximum Capacitance at V <sub>F</sub> =V <sub>R</sub> =0	C <sub>J</sub>	4	pF
Maximum Reverse Recovery Time From I <sub>F</sub> =-I <sub>R</sub> =10mA to I <sub>RR</sub> =-1mA ,V <sub>R</sub> =6V R <sub>L</sub> =100 Ω	t <sub>rr</sub>	2	ns
Typical Maximum Thermal Resistance	R <sub>θJA</sub>	350	°C / W
Junction Temperature and Storage Temperature Range	T <sub>J</sub> ,T <sub>S</sub>	-65 to +175	°C

NOTE:

1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHZ

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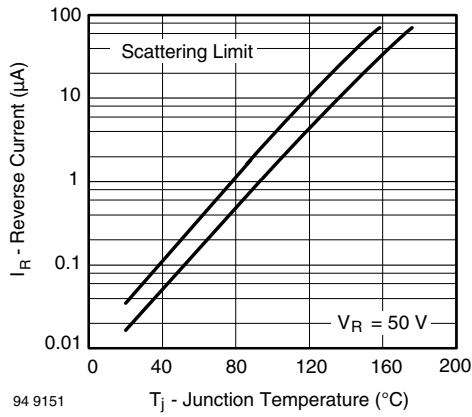


Fig. 1 - Reverse Current vs. Junction Temperature

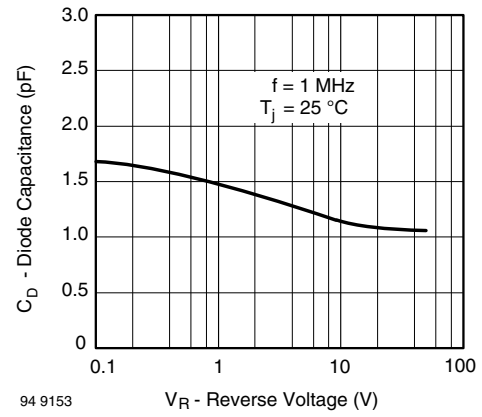


Fig. 3 - Diode Capacitance vs. Reverse Voltage

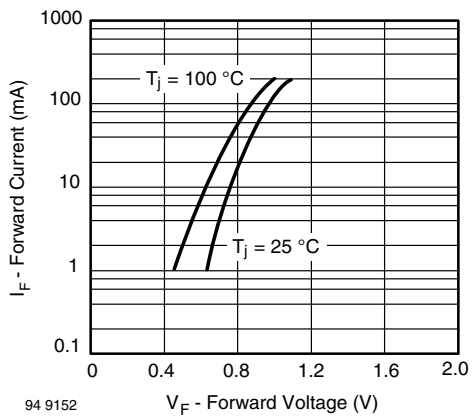


Fig. 2 - Forward Current vs. Forward Voltage

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## Part No\_packing code\_Version

1N4151\_AX\_10001

1N4151\_AY\_10001

1N4151\_R2\_10001

1N4151\_B0\_10001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			

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