

## FAST SWITCHING DIODE

### 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

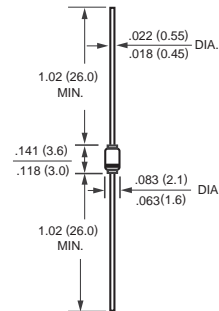
- \* Case : Molded Glass DO-35
- \* Terminals : Solderable per MIL-STD-750, Method 2026

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.



DO-35



\*Dimensions in inches and (millimeters)

MAXIMUM RATINGS ( @ TA = 25°C unless otherwise noted )

RATINGS	SYMBOL	1N4151	UNITS
Peak Reverse Voltage	$V_{RM}$	75	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	Volts
Maximum Average Forward Current at $f > 50\text{Hz}$	$I_{F(AV)}$	150	mAmps
Surge Forward Current at $t < 1\text{s}$	$I_{FSM}$	500	mAmps
Typical Current Squared Time	$I^2T$	0.125	$A^2S$
Typical Reverse Recovery Time( $I_F=I_R=10\text{mA}$ , $I_{RR}=0.1X_{IR}$ , $R_L=100 \Omega$ )	$T_{RR}$	2	nS
Typical Junction Capacitance( $V_R=0\text{V}$ , $f=1\text{MHz}$ )	$C_J$	4	pF
Power Dissipation	$P_{tot}$	500	mW
Typical Maximum Thermal Resistance	$R_{\theta JA}$	350	$^{\circ}C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to + 175	$^{\circ}C$

ELECTRICAL CHARACTERISTICS ( @TA=25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	1N4151	UNITS
Maximum Instantaneous Forward Voltage @ $I_F=50\text{mA}$	$V_F$	1.0	Volts
Maximum Instantaneous Reverse Current $V_R=50\text{V}$	$I_R$	50	nAmps
		50	uAmps

## RATING AND CHARACTERISTICS CURVES (1N4151 )

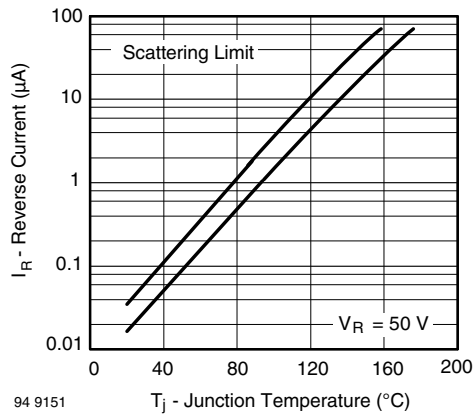


Fig. 1 - Reverse Current vs. Junction Temperature

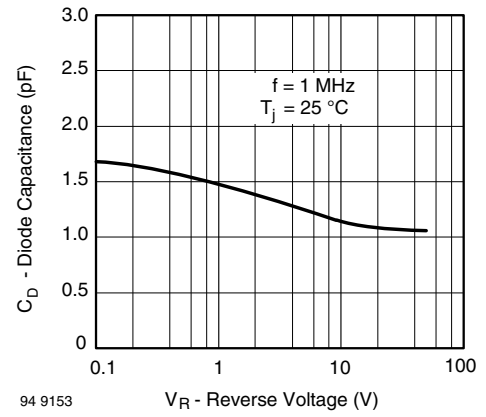


Fig. 3 - Diode Capacitance vs. Reverse Voltage

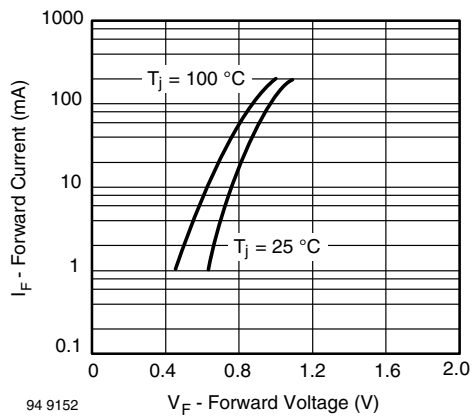


Fig. 2 - Forward Current vs. Forward Voltage

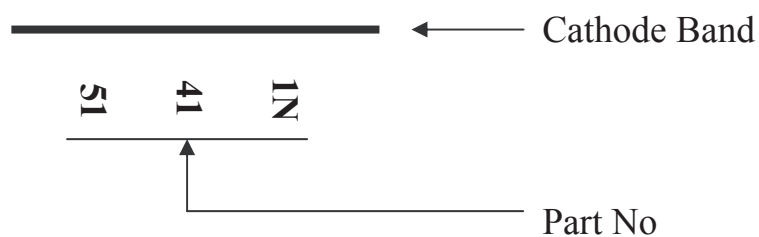


## Attachment information about 1N4151

### 1. Internal Circuit



### 2. Marking on the body



# PACKAGING OF DIODE

## BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-35	-B	10,000	240*100*100	410*350*275	120,000	21.5

## REEL PACK

PACKAGE	PACKING CODE	REEL ( EA )	COMPONENT SPACE(mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-35	-T	10,000	5.0	52	356	380*380*420	50,000	11.00

## AMMO PACK

PACKAGE	PACKING CODE	REEL ( EA )	COMPONENT SPACE(mm)	TAPE SPACE (mm)	BOX SIZE (mm)	CARTON SIZE(mm)	CARTON ( EA )	GROSS WEIGHT (Kg)
DO-35	-F	5,000	5.0	52	250*80*80	410*260*340	100,000	20.00

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