

HIGH SPEED SWITCHING DIODE

FEATURES

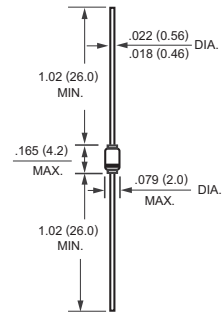
- * High reliability
- * DO-35 Package (JEDEC)
- * High forward current capability

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.



DO-35



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

RATINGS	SYMBOL	1N4150	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	Volts
Maximum RMS Voltage	V_{RMS}	35	Volts
Maximum DC Blocking Voltage	V_{DC}	50	Volts
Average forward current $V_R=0$	I_{FAV}	300	mAmps
Maximum Average Forward Rectified Current	I_O	600	mAmps
Non-Repetitive Peak Forward Surge Current $t_p=1\mu s$	I_{FSM}	4	Amps
Typical Reverse Recovery Time($I_F=I_R=30mA, I_{rr}\approx 0.1I_R, R_L=100\Omega$)	T_{rr}	4	nS
Maximum Diode capacitance($V_R=0V, f=1MHz$)	C_D	2.5	pF
Maximum Power Dissipation	P_D	500	mW
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175	°C

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

CHARACTERISTICS	SYMBOL	1N4150	UNITS
Maximum Instantaneous Forward Voltage	@ $I_F=1mA$	0.62	Volts
	@ $I_F=10mA$	0.74	
	@ $I_F=50mA$	0.86	
	@ $I_F=100mA$	0.92	
	@ $I_F=200mA$	1.0	
Maximum Instantaneous Reverse Current	@ $T_A=25\text{ }^\circ\text{C}$	100	nAmps
	@ $T_A=150\text{ }^\circ\text{C}$	100	uAmps

RATING AND CHARACTERISTICS CURVES (1N4150)

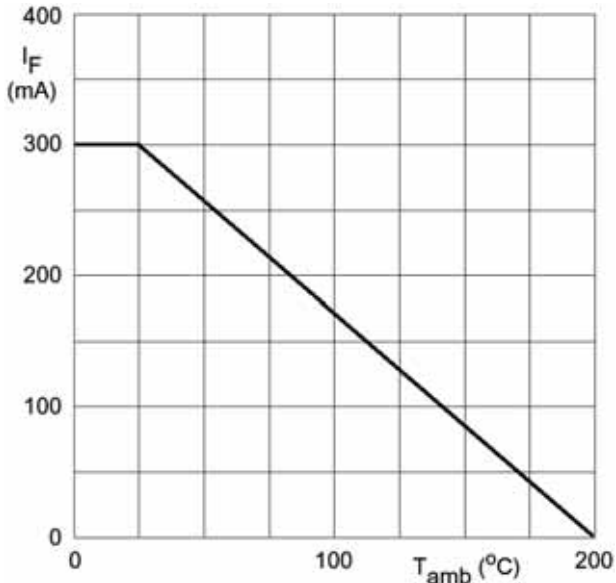


Figure 1. Maximum permissible continuous forward current vs. ambient temperature

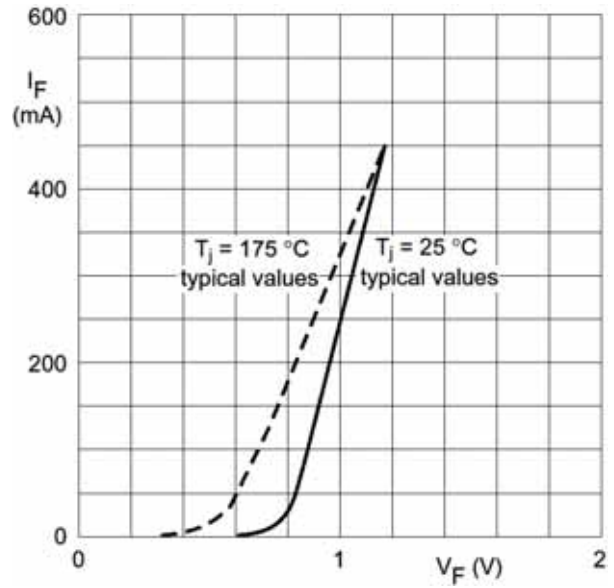


Figure 2. Forward current vs. forward voltage

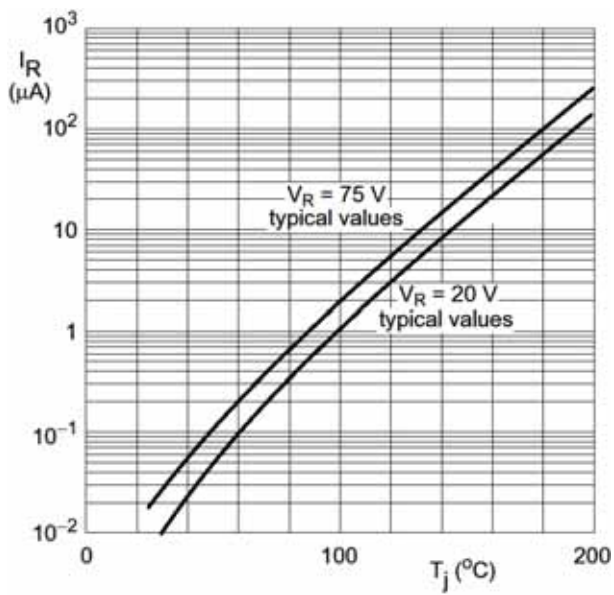


Figure 3. Reverse current vs. junction temperature

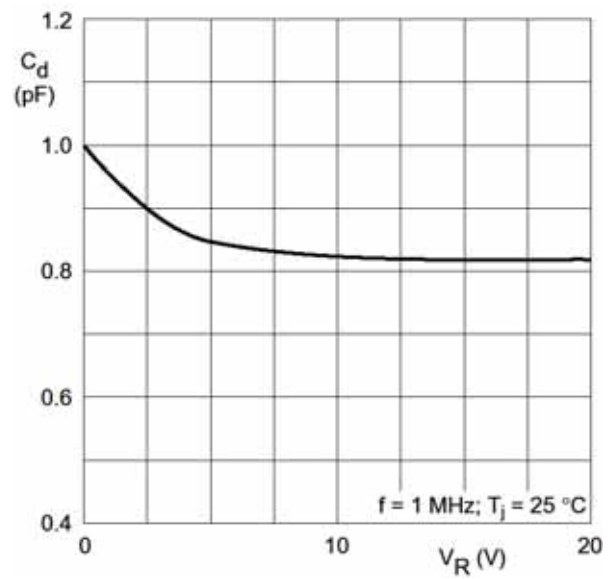


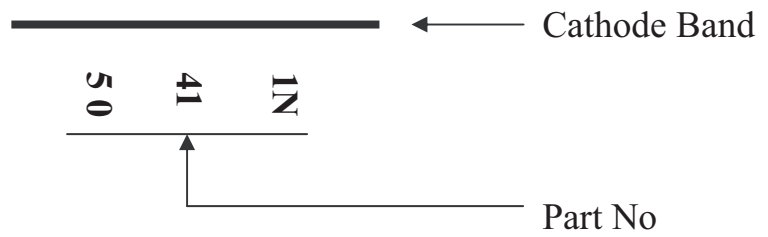
Figure 4. Diode capacitance vs. reverse voltage (Typical values)



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