

SMALL SIGNAL SWITCHING DIODE

VOLTAGE RANGE: 50 V
CURRENT: 150 m A

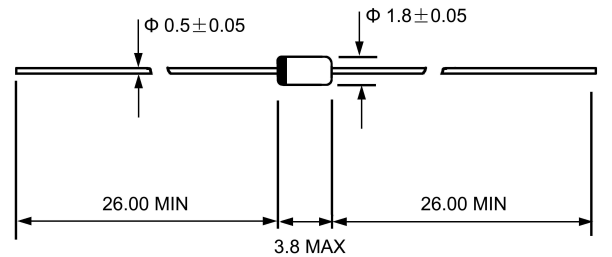
FEATURES

- Silicon epitaxial planar diode
- High speed switching diode
- 500 mW power dissipation

MECHANICAL DATA

- Case: DO-35, glass case
- Polarity: Color band denotes cathode
- Weight: 0.004 ounces, 0.13 grams

DO - 35



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

MAXIMUM RATINGS

		1N4150	UNITS
Reverse voltage	V_R	50	V
Peak reverse voltage	V_{RM}	50	V
Average forward rectified current $V_R=0V$	I_O	150	mA
Forward surge current at $t=1\mu s$	I_{FSM}	4.0	A
Power dissipation	P_{tot}	500	mW
Thermal resistance junction to ambient	R_{thja}	500	K/W
Junction temperature	T_j	175	
Storage temperature range	T_{STG}	-65 --- + 175	

ELECTRICAL CHARACTERISTICS

		MIN.	MAX.	UNITS
Forward voltage at $I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=100mA$ $I_F=200mA$	V_F	0.54	0.62	V
		0.66	0.74	
		0.76	0.86	
		0.82	0.92	
		0.87	1.0	
Leakage current @ $V_R=50V, T_J=25$ $V_R=50V, T_J=150$	I_R	-	0.1	μA
		-	100	
Capacitance at $V_R=0V, f=1MHz, V_{HF}=50mV$	C_{tot}	-	2.5	pF
Reverse recovery time $I_F=I_R=(10to100mA), i_R=0.1 \times I_R$ $R_L=100$	t_{rr}	-	4.0	ns

**FIG.1 – ADMISSIBLE POWER DISSIPATION
VERSUS AMBIENT TEMPERATURE**

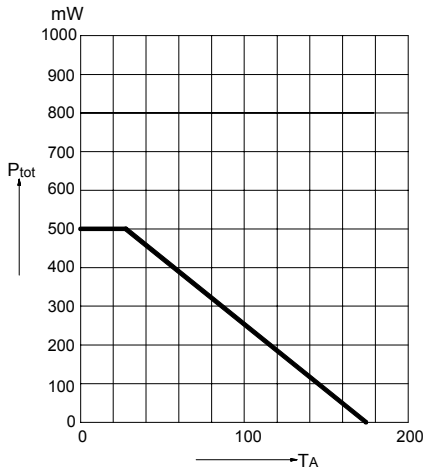


FIG.2 – FORWARD CHARACTERISTICS

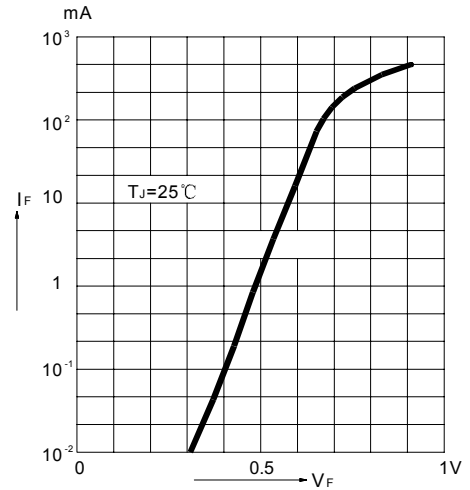


FIG.3 – LEAKAGE CURRENT VERSUS JUNCTION TEMPERATURE

