SMALL SIGNAL SWITCHING DIODE

VOLTAGE RANGE: 50 V
CURRENT: 300 m A

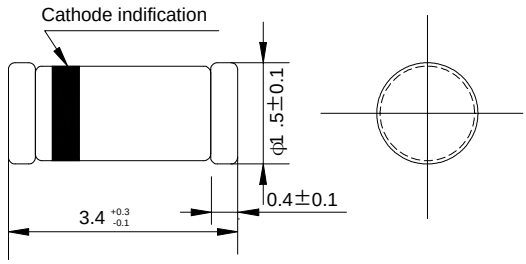
FEATURES

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

MECHANICAL DATA

- ◇ Case: MINI-MELF,glass case
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: Approx 0.031 grams

MINI-MELF



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

MAXIMUM RATINGS

		LL4150	UNITS
Reverse voltage	V_R	50	V
Peak reverse voltage	V_{RM}	50	V
Average forward rectified current V_R=0V	I_O	300	mA
Forward surge current at t=1μs	I_{FSM}	4.0	A
Power dissipation	P_{tot}	500	mW
Thermal resistance junction to ambient	R_{thja}	350	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	V_F	0.54	0.62	V
I_F=10mA		0.66	0.74	
I_F=50mA		0.76	0.86	
I_F=100mA		0.82	0.92	
I_F=200mA		0.87	1.0	
Leakage current @V_R=50V,T_J=25℃	I_R	-	0.1	μA
V_R=50V,T_J=150℃		-	100	
Capacitance at V_R=0V,f=1MH$_Z$,V_{HF}=50mV	C_{tot}	-	2.5	pF
Reverse recovery time I_F=I_R=(10to100mA),i_R=0.1×I_R R_L=100Ω	t_{rr}	-	4.0	ns

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FIG.1 -- ADMISSIBLE POWER DISSIPATION VERSUS AMBIENT TEMPERATURE

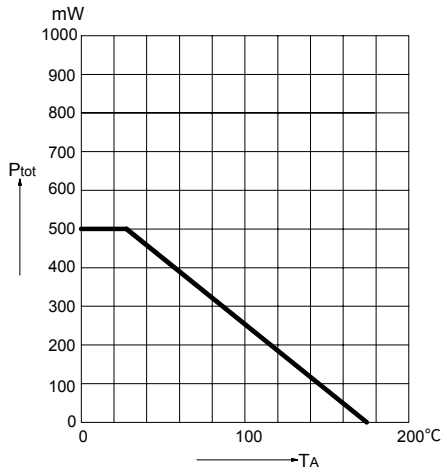

FIG.2 -- FORWARD CHARACTERISTICS

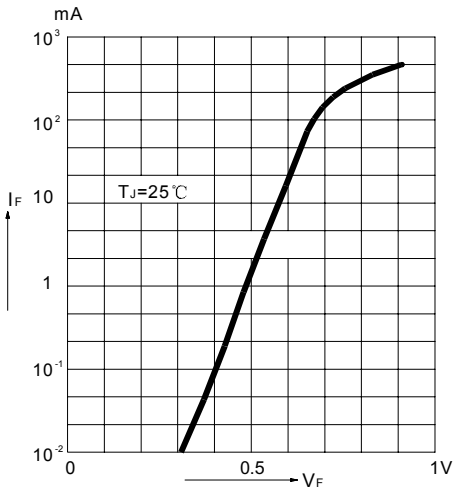

FIG.3 – LEAKAGE CURRENT VERSUS JUNCTION TEMPERATURE