



LL4148

Switching Diode

REVERSE VOLTAGE 75 Volts
FORWARD CURRENT 0.15 Amperes

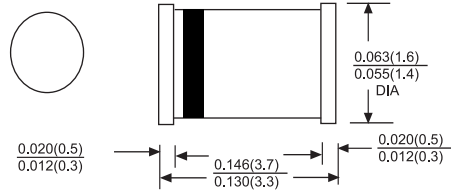
Features

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

Mechanical Data

- Cases: Min-MELF glass case
- Polarity: Color band denotes cathode
- Weight: Approx. 0.05 grams

MINI MELF(LL-34)



Inch(mm)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Type Number		LL4148	Units
DC Block Voltage	V _R	75	V
Non-Peak Reverse Voltage	V _{RM}	100	V
Average Forward Rectified Current Half Wave Rectification with Resist load	I _O	150	mA
Forward Surge Current at t<1s and T _j <25°C	I _{FSM}	500	mA
Power Classification at T _j	P _{tot}	500 ⁽¹⁾	mW
Junction Temperature	T _J	175	°C
Storage Temperature Range	T _{STG}	-65 to +175	°C

NOTE:(1)Valid provided that

Electrical Characteristics

		Min	Typ	Max	Units
Forward Voltage at I _F =10mA	V _F	—	—	1	
Leakage Current at V _R =20V at V _R =75V at V _R =20V, T _j =150°C	I _R	—	—	25	nA
	I _R	—	—	5	uA
	I _R	—	—	50	uA
Capacitance at V _F =V _R =0V	C _j	—	—	4	pF
Voltage Rise when Switching ON loaded with 50mA pulse tp 0.1us Rise Time<30ns Ip=5 to 100Hz	V _{tt}	—	—	2.5	V
Reverse Recovery Time from I _F =10mA V _R =V _F , R _L =100Ω at I _R =1mA	t _{rr}	—	—	4	ns
Thermal Resistance Junction to Ambient	R _{θJA}	—	—	350	K/W
Rectification Efficiency at 100MHz, V _r <2V	η _V	0.45	—	—	—

NOTE: (1)Valid provided that electrodes are kept at ambient temperature.



FIG.4-RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT

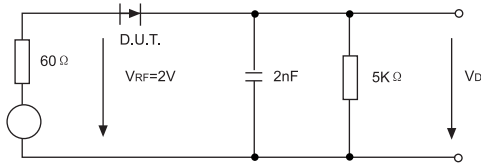


FIG.5- RELATIVE CAPACITANCE VERSUS VOLTAGE

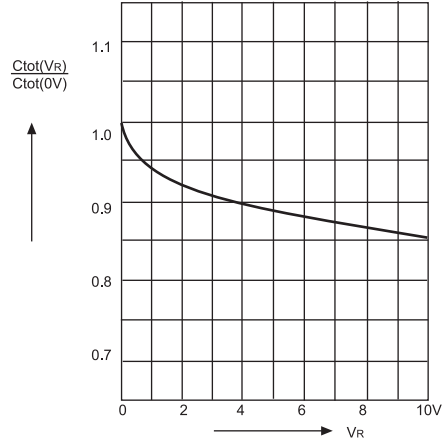


FIG.6-LEAKAGE CURRENT VERSUS JUNCTION TEMPERATURE

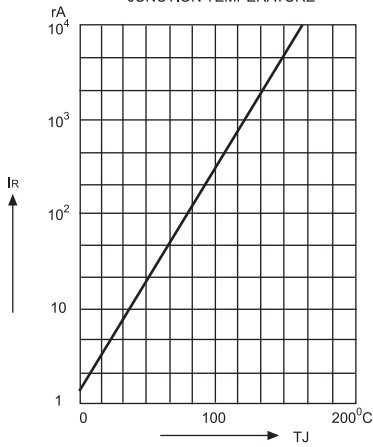


FIG.7-DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT

