LL4148

75V-0.15A Fast Switching Diodes

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MINI MELF
(SOD-80 / LL-34)

Feature

- V_R 75V
- I_{FAV} 150mA

Application

- Extreme fast switches

ABSOLUTE MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RSM}	100	V
Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Average rectified output current	I_O	0.15	A
Forward continuous current	I_{FM}	0.30	A
Non-repetitive Peak Forward Surge Current @ t=1 us	I_{FSM}	2	A
Non-repetitive Peak Forward Surge Current @ t=1 s		1	A
Power Dissipation	P_D	0.4	W
Junction Temperature	T_J	125	℃
Storage Temperature	T_{STG}	-65 ~ +150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Max	Unit
Forward voltage	V_F	I_F =50mA		1.0	V
Reverse current	I_R	V_R =20V		25	nA
		V_R =75V		5	μA
Diode capacitance	C_D	V_R=0V, f=1MHz		4	pF
Reverse Recovery Time	trr	I_F=I_R=10mA，I_{rr}=0.1*IR，R_L=100Ω，V_R=6V		4	ns

Typical Electrical and Thermal Characteristics

FIG1: Forward Current vs. Forward Voltage

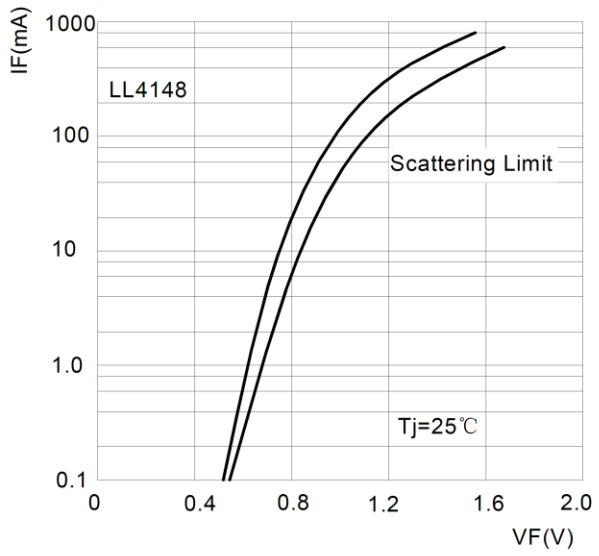


FIG2:Reverse Current vs. Reverse Voltage

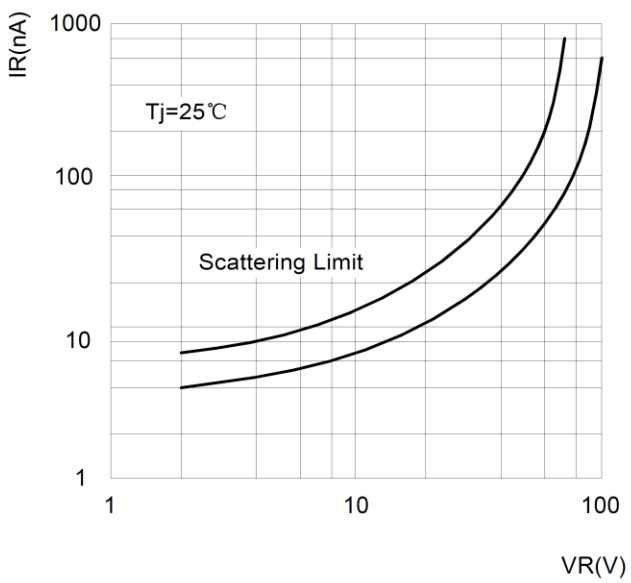
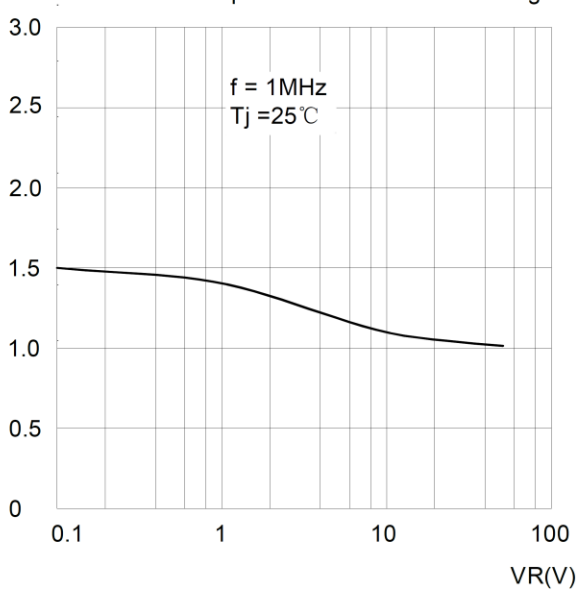
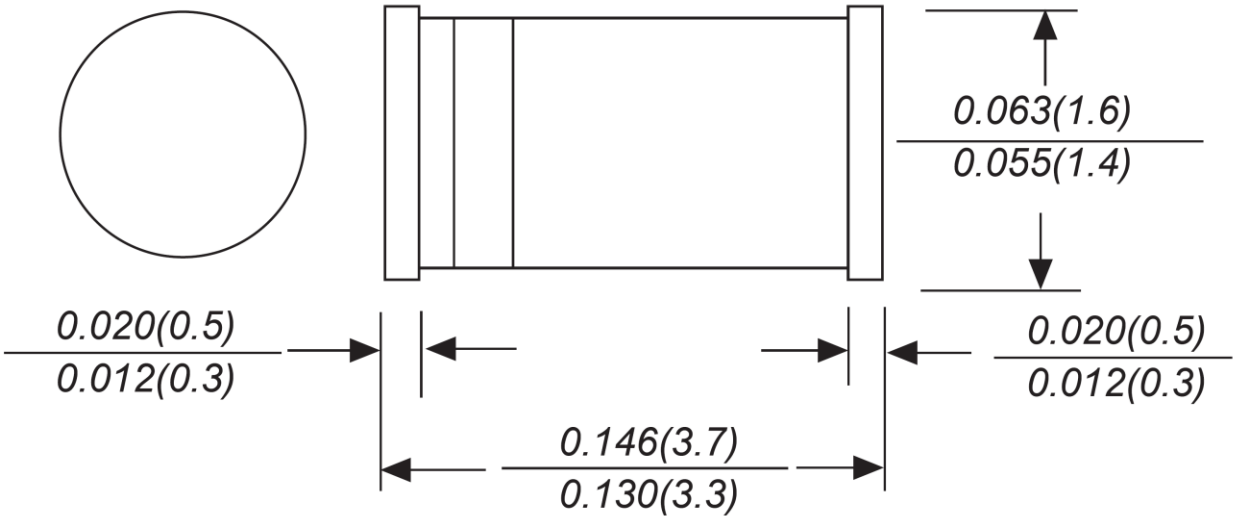


FIG3:Diode Capacitance vs. Reverse Voltage

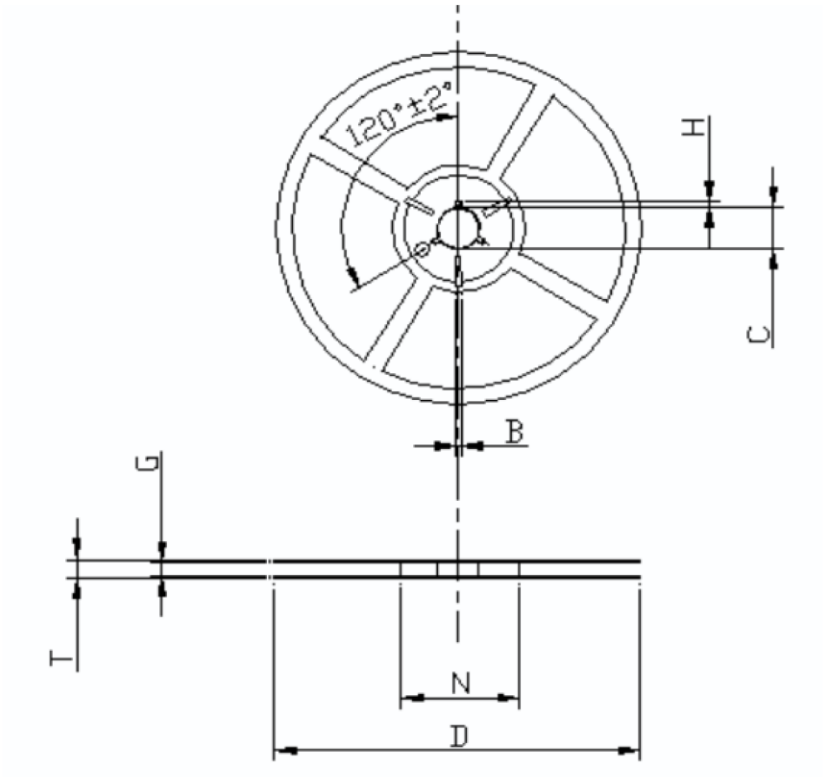


MINI MELF Package Outline Dimensions

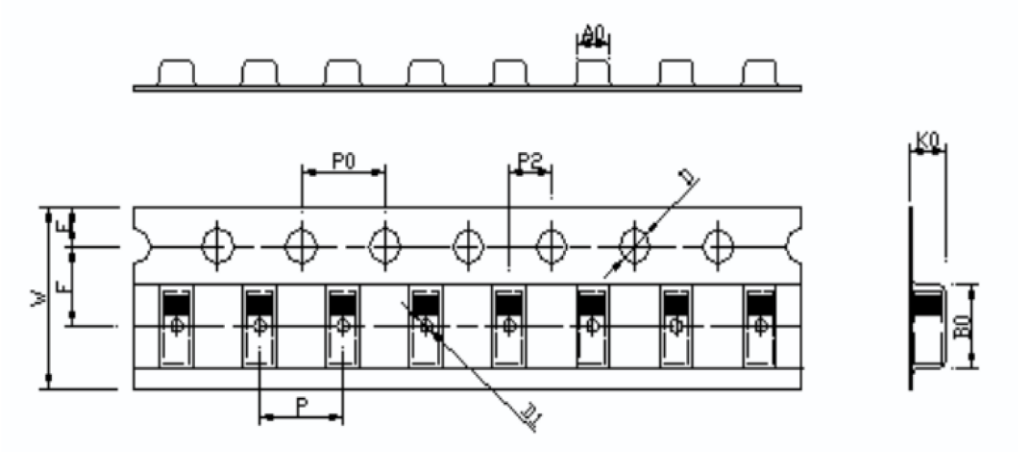


Dimensions in millimeters

Reel Taping Specifications For MINI MELF



SYMBOL	B	C	D	G	H	N	T
SIZE(mm)	2±0.5	13±0.5	178±2	8.4±1.5	4±0.5	60	<14.9



SYMBOL	W	P	E	F	D	D1	P0	P2	A0	B0	K0
SIZE(mm)	8.0±0.1	4.0±0.1	1.75±0.1	3.5±0.05	1.5±0.1	1.0±0.1	4.0±0.1	2.0±0.05	1.70±0.1	3.80±0.1	1.85±0.1