

MCL4448

FAST SWITCHING SURFACE MOUNT DIODES

VOLTAGE

100 Volts

POWER

500 mW

MICRO-MELF

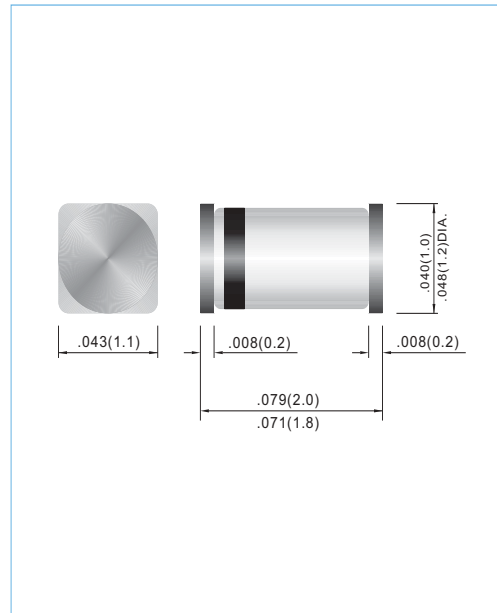
Unit : inch (mm)

FEATURES

- Fast switching Speed.
- Surface Mount Package Ideally Suited For Automatic Insertion.
- Silicon Epitaxial Planar Construction.
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: MICRO, MELF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band
- Marking: Cathode Band Only
- Weight: 0.011 grams(approx)



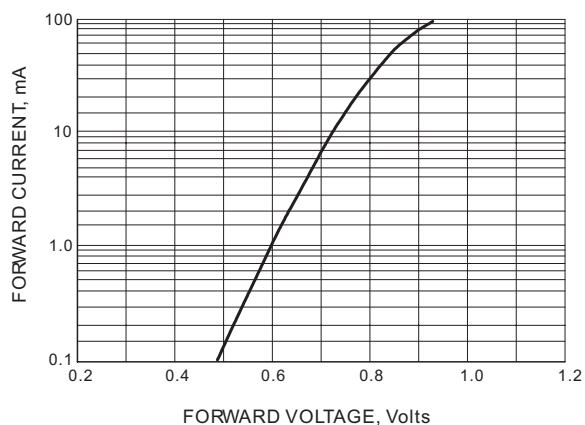
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_J =25°C unless otherwise noted)

PARAMETER	SYMBOL	MCL4448	UNITS
Peak Reverse Voltage	V _{RM}	100	V
Maximum DC Blocking Voltage	V _{DC}	75	V
Maximum Average Forward Current at Ta=25 °C And f ≥50Hz	I _{AV}	150	mA
Surge Forward Current at t < 1s and T _J = 25 °C	I _{FSM}	500	mA
Power Dissipation at Tamb= 25 °C	P _{TOT}	500	mW
Maximum Forward Voltage at I _F =100mA	V _F	1.0	V
Maximum Leakage Current at V _R =20V at V _R =20V ,T _J = 150°C	I _R	30 50	nA μA
Maximum Capacitance at V _F =V _R =0	C _J	4	pF
Maximum Reverse Recovery Time From I _F =-I _R =10mA to I _{RR} =-1mA ,V _R =6V R _L =100 Ω	t _{rr}	4	ns
Typical Maximum Thermal Resistance	R _{θJA}	350	°C / W
Junction Temperature and Storage Temperature Range	T _J ,T _S	-65 to +175	°C

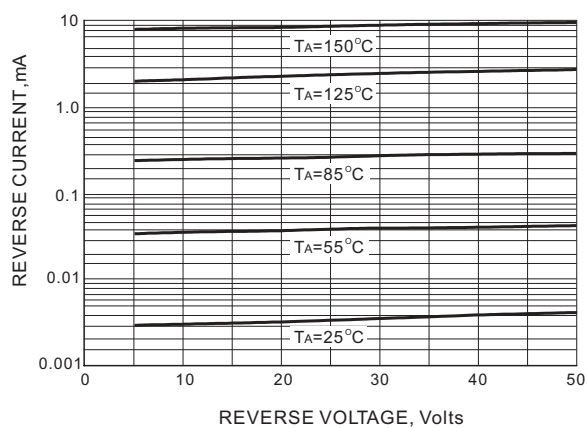
NOTE:

1. C_J at V_R=0, f=1MHZ
2. From I_F=10mA to I_R=1mA, V_R=6Volts, R_L=100Ω

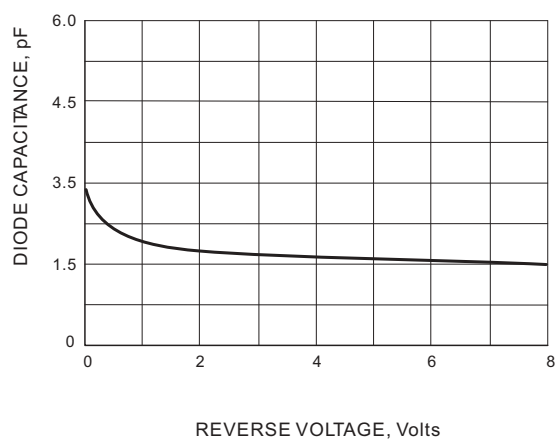
MCL4448



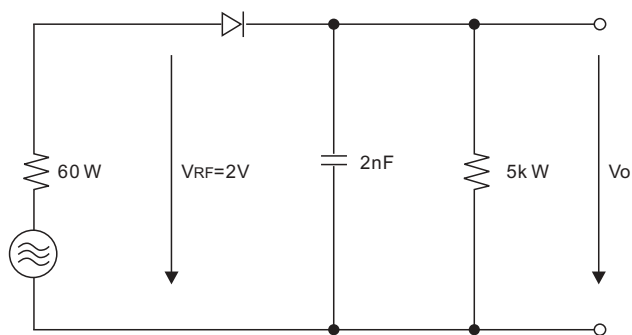
FORWARD VOLTAGE



LEAKAGE CURRENT



TYPICAL CAPATCANCE



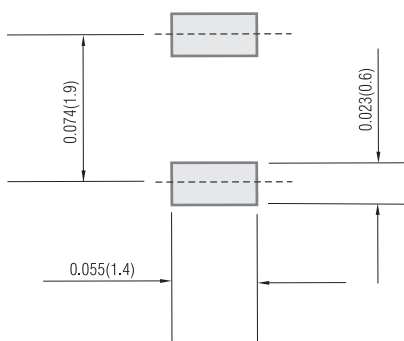
RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT

MCL4448

MOUNTING PAD LAYOUT

MICRO-MELF

Unit: inch (mm)



ORDER INFORMATION

- Packing information

T/R - 10K per 13" plastic Reel

T/R - 2.5K per 7" plastic Reel

LEGAL STATEMENT

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