



MCL4448

FAST SWITCHING SURFACE MOUNT DIODES

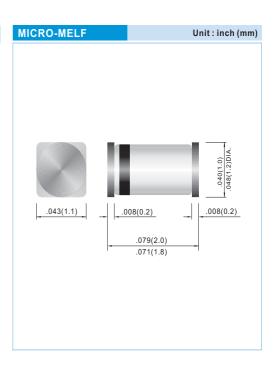
VOLTAGE 100 Volts POWER 500 mW

FEATURES

- Fast switching Speed.
- Surface Mount Package Ideally Suited For Automatic Insertion.
- Silicon Epitaxal 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 BandMarking: Cathode Band OnlyWeight: 0.011 grams(approx)



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

PARAMETER	SYMBOL	MCL4448	UNITS
Peak Reverse Voltage	Vrm	100	V
Maximum DC Blocking Voltage	VDC	75	V
Maximum Average Forward Current at Ta=25 °C And f ≥50Hz	lav	150	mA
Surge Forward Current at t < 1s and Tj= =25 °C	I FSM	500	mA
Power Dissipation at Tamb= 25 °C	Ртот	500	mW
Maximum Forward Voltage at I _F =100mA	VF	1.0	V
Maximum Leakage Current at V_R =20V at V_R =20V , T_J = 150°C	lR	30 50	nA μA
Maximum Capacitance at V _F =V _R =0	CJ	4	pF
Maximum Reverse Recovery Time From $I_F = -I_R = 10 \text{mA}$ to $I_{RR} = -1 \text{mA}$, $V_R = 6 V$ $R_L = 100 \Omega$	t _{rr}	4	ns
Typical Maximum Thermal Resistance	$R_{\theta JA}$	350	°C/W
Junction Temperature and Storage Temperature Range	TJ,T _s	-65 to +175	°C

NOTE:

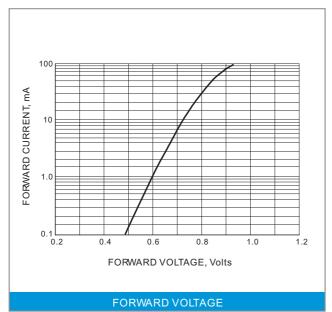
- 1. CJ at VR=0, f=1MHZ
- 2. From IF=10mA to IR=1mA, VR=6Volts, RL=100 Ω

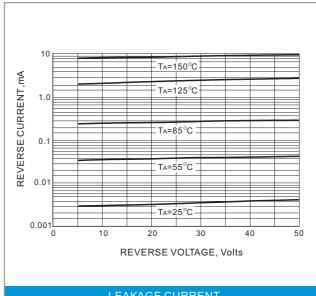
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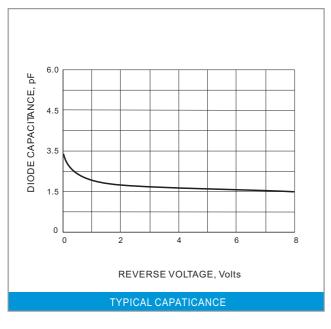


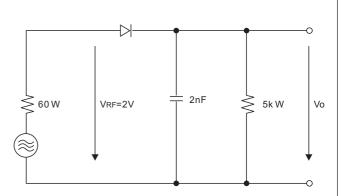


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RECTIFICATION EFFCIENCY MEASUREMENT CIRCUIT

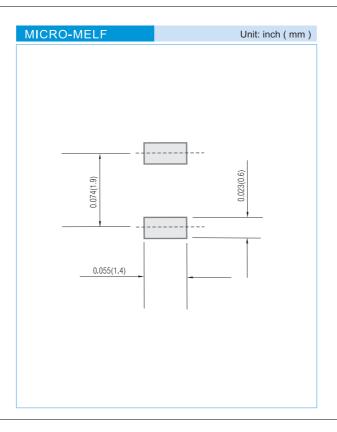
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MOUNTING PAD LAYOUT



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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