



MCL4448

FAST SWITCHING SURFACE MOUNT DIODES

VOLTAGE

100 Volts

POWER

500 mW

MICRO-MELF

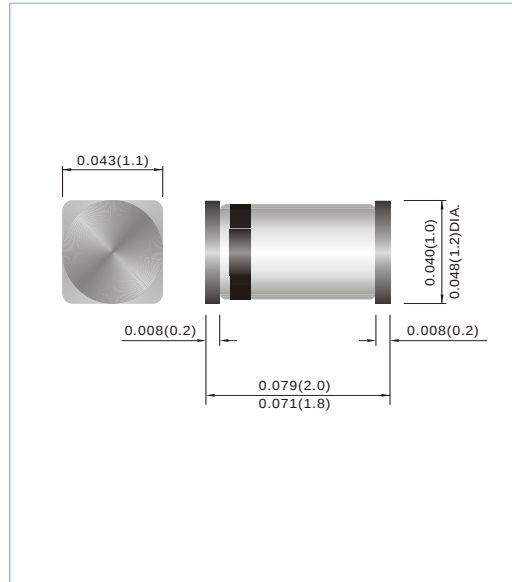
Unit : inch(mm)

FEATURES

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

MECHANICAL DATA

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



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

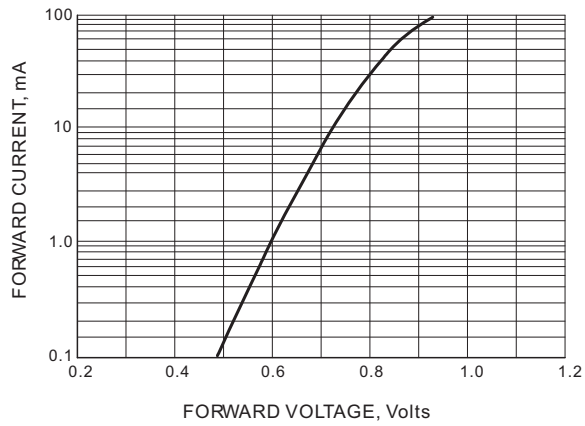
PARAMETER	SYMBOL	MCL4448	UNITS
Peak Reverse Voltage	V _{RM}	100	V
Maximum DC Blocking Voltage	V _{DC}	75	V
Maximum Average Forward Current at T _A =25°C And f ≥50Hz	I _{AV}	150	mA
Surge Forward Current at t < 1s and T _J =25°C	I _{FSM}	500	mA
Power Dissipation at T _A = 25°C	P _{TOT}	500	mW
Maximum Forward Voltage at I _F =100mA	V _F	1	V
Maximum Leakage Current at V _R =20V at V _R =20V ,T _J =150°C	I _R	25 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 =100Ω	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:

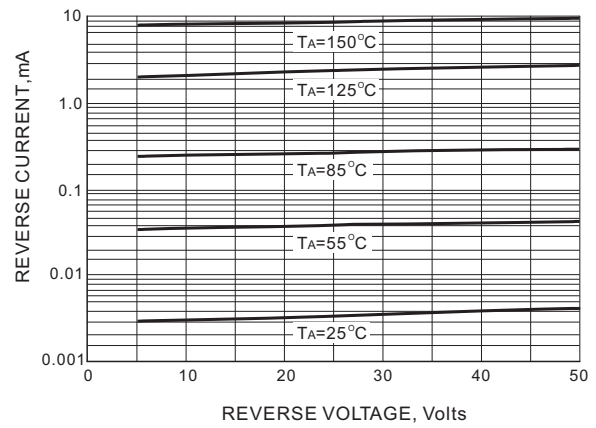
1. C_J at V_R=0, f=1MHZ
2. From I_F=10mA to I_R=1mA, V_R=6Volts, R_L=100Ω



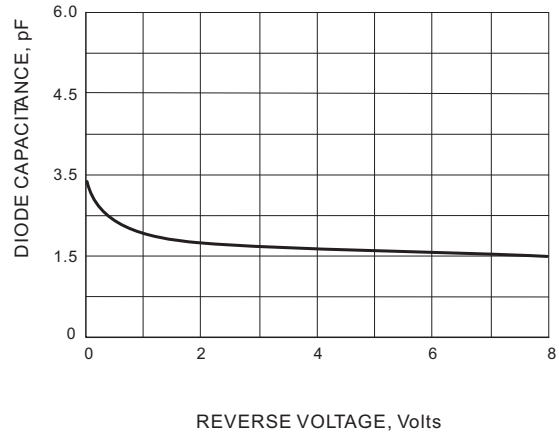
MCL4448



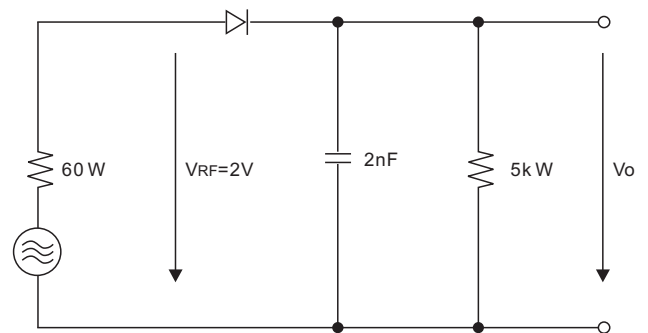
FORWARD VOLTAGE



LEAKAGE CURRENT



TYPICAL CAPATICANCE



RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT

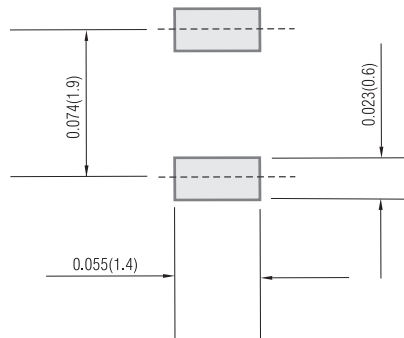


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MOUNTING PAD LAYOUT

MICRO-MELF

Unit: inch (mm)



ORDER INFORMATION

- Packing information

T/R - 10K per 13" plastic Reel

T/R - 2.5K per 7" plastic Reel



MCL4448

Part No_packing code_Version

MCL4448_R1_10001

MCL4448_R2_10001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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