

# MCL914

## SWITCHING DIODES

**VOLTAGE** 100 Volts **POWER** 500 mWatts

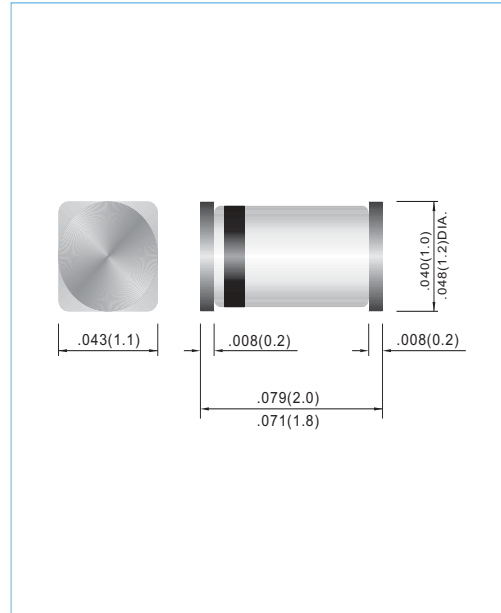
### FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- High Conductance
- Axial lead Package Ideally Suited for Automatic Insertion.
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: Molded Glass MICRO MELF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx. Weight: 0.011 grams
- Mounting Position: Any
- Packing information
  - T/R - 10K per 13" plastic Reel
  - T/R - 2.5K per 7" plastic Reel

**MICRO-MELF** Unit : inch (mm)



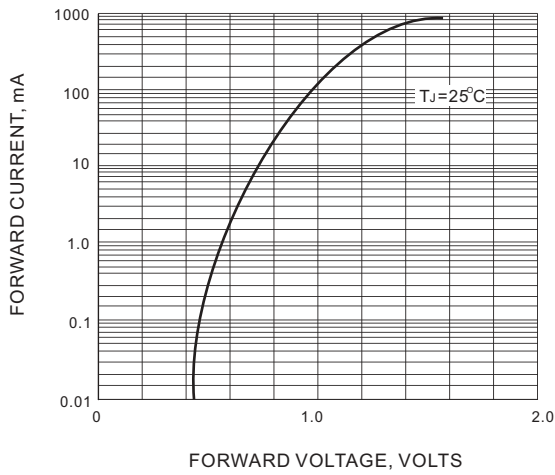
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>J</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	MCL914	UNITS
Reverse Voltage	V <sub>R</sub>	75	V
Peak Reverse Voltage	V <sub>RM</sub>	100	V
RMS Voltage	V <sub>RMS</sub>	50	V
Maximum Average Forward Current at T <sub>A</sub> =25°C And f ≥ 50Hz	I <sub>F(AV)</sub>	75	mA
Surge Forward Current at t < 1s and T <sub>J</sub> =25 °C	I <sub>FSM</sub>	500	mA
Power Dissipation at Tamb= 25 °C	P <sub>TOT</sub>	500	mW
Maximum Forward Voltage at I <sub>F</sub> =10mA	V <sub>F</sub>	1.0	V
Maximum Leakage Current at V <sub>R</sub> =20V at V <sub>R</sub> =75V at V <sub>R</sub> =20V ,T <sub>J</sub> = 150 °C	I <sub>R</sub>	25 5 50	nA μA μA
Maximum Capacitance (Note 1)	C <sub>J</sub>	4	pF
Maximum Reverse Recovery Time (Note 2)	t <sub>rr</sub>	4	ns
Typical Thermal Resistance	R <sub>θJA</sub>	350	°C / W
Junction Temperature and Storage Temperature Range	T <sub>J</sub> ,T <sub>S</sub>	-65 to +175	°C

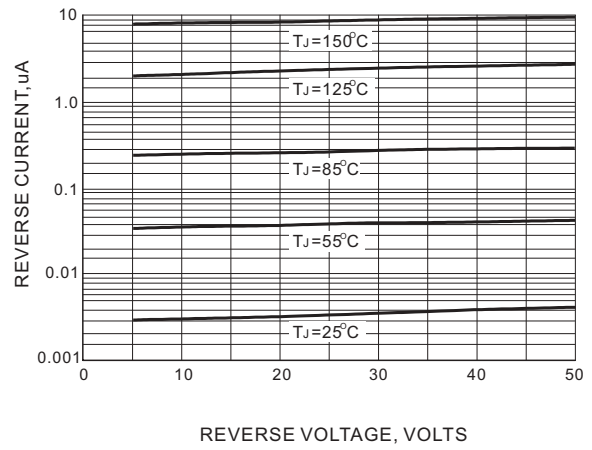
**NOTE:**

1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHZ
2. From I<sub>F</sub>=10mA to I<sub>R</sub>=1mA, V<sub>R</sub>=6Volts, R<sub>L</sub>=100Ω

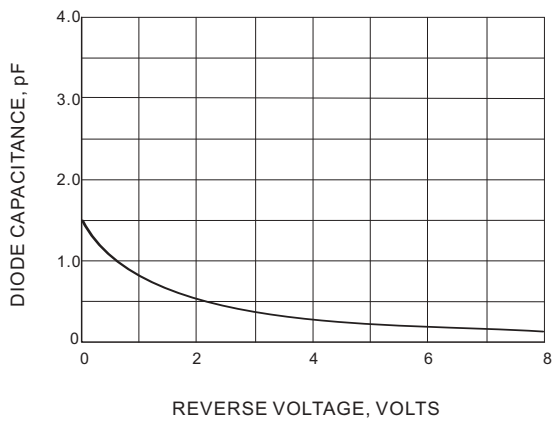
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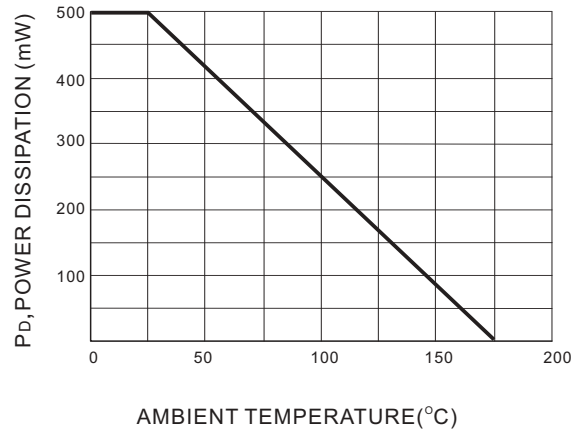
FORWARD VOLTAGE



LEAKAGE CURRENT



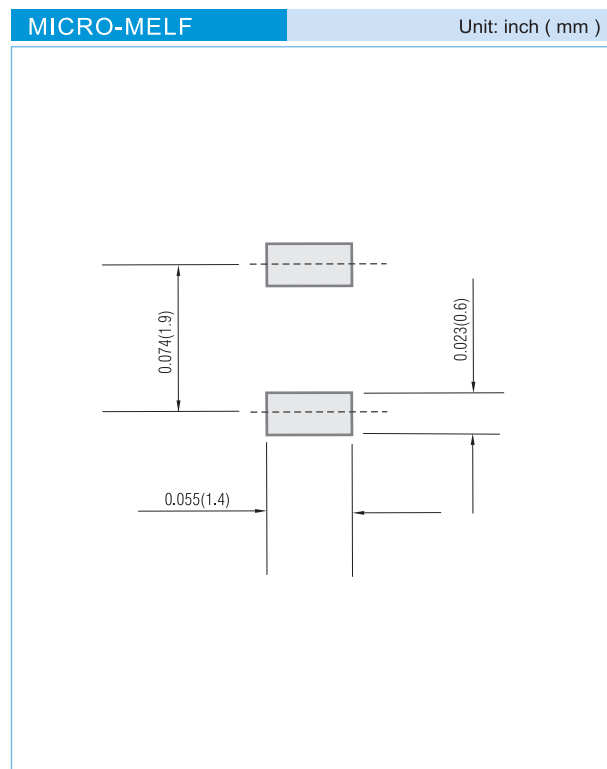
TYPICAL CAPATICANCE



POWER DERATING

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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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