

# LL4448

## FAST SWITCHING SURFACE MOUNT DIODES

### VOLTAGE

100 Volts

### POWER

500 mW

### MINI-MELF / LL34

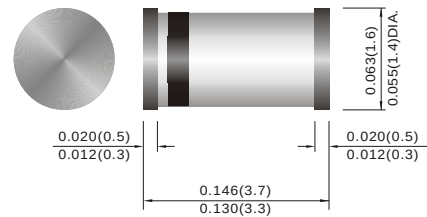
Unit : inch(mm)

### 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: MINI MELF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band
- Marking: Cathode Band Only
- Weight: 0.03 grams(approx)



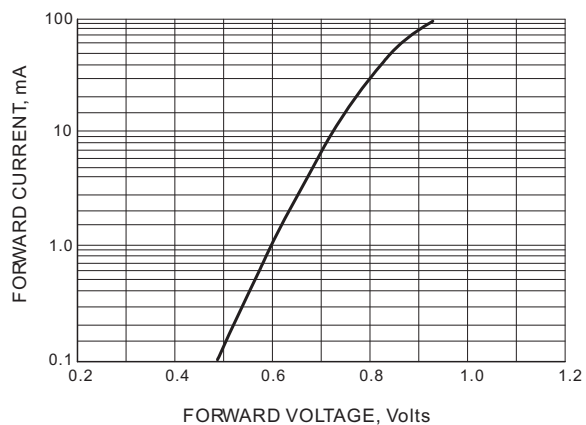
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>J</sub>=25°C unless otherwise noted)

| PARAMETER                                                                                                                                        | SYMBOL                           | VALUE       | UNITS    |
|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------|----------|
| Peak Reverse Voltage                                                                                                                             | V <sub>RM</sub>                  | 100         | V        |
| Maximum DC Blocking Voltage                                                                                                                      | V <sub>DC</sub>                  | 75          | V        |
| Maximum Average Forward Current at T <sub>A</sub> =25°C And f ≥50Hz                                                                              | I <sub>AV</sub>                  | 150         | mA       |
| Surge Forward Current at t < 1s and T <sub>J</sub> = 25°C                                                                                        | I <sub>FSM</sub>                 | 500         | mA       |
| Power Dissipation at T <sub>A</sub> = 25°C                                                                                                       | P <sub>TOT</sub>                 | 500         | mW       |
| Maximum Forward Voltage at I <sub>F</sub> =100mA                                                                                                 | V <sub>F</sub>                   | 1.0         | V        |
| Maximum Leakage Current<br>at V <sub>R</sub> =20V<br>at V <sub>R</sub> =20V ,T <sub>J</sub> = 150°C                                              | I <sub>R</sub>                   | 30<br>50    | nA<br>μA |
| Maximum Capacitance at V <sub>F</sub> =V <sub>R</sub> =0                                                                                         | C <sub>J</sub>                   | 4           | pF       |
| Maximum Reverse Recovery Time From<br>I <sub>F</sub> = -I <sub>R</sub> =10mA to I <sub>RR</sub> = -1mA ,V <sub>R</sub> =6V R <sub>L</sub> =100 Ω | t <sub>rr</sub>                  | 4           | ns       |
| Typical Maximum Thermal Resistance                                                                                                               | R <sub>θJA</sub>                 | 350         | °C / W   |
| Operating Junction Temperature and Storage Temperature Range                                                                                     | T <sub>J</sub> ,T <sub>STG</sub> | -65 to +175 | °C       |

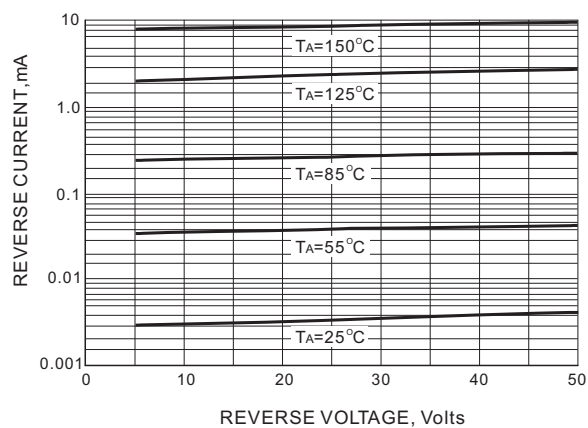
### NOTE:

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

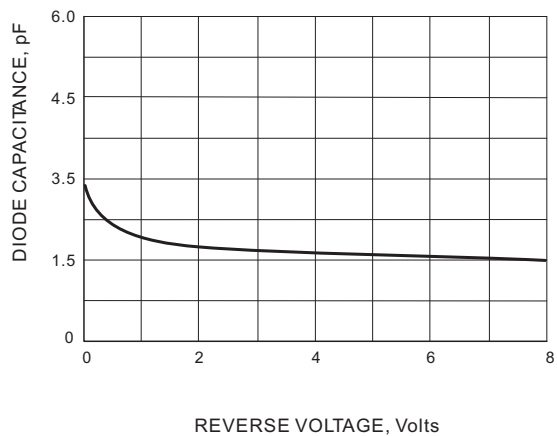
# LL4448



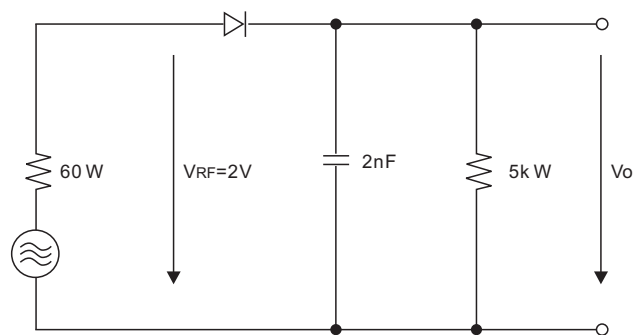
FORWARD VOLTAGE



LEAKAGE CURRENT



TYPICAL CAPATICANCE



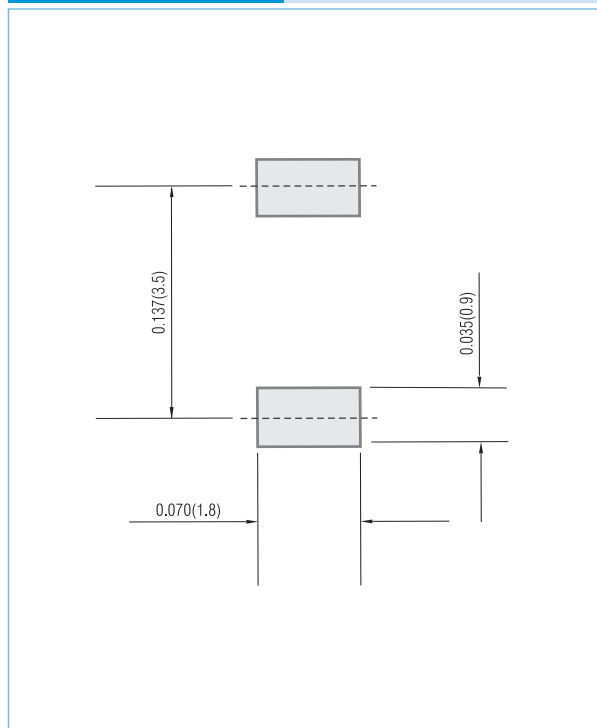
RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT

# LL4448

## MOUNTING PAD LAYOUT

MINI-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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