

# LS4150

## FAST SWITCHING SURFACE MOUNT DIODES

**VOLTAGE** 50 Volts **POWER** 500 mWatts

**QUADRO-MELF**

Unit : inch(mm)

### FEATURES

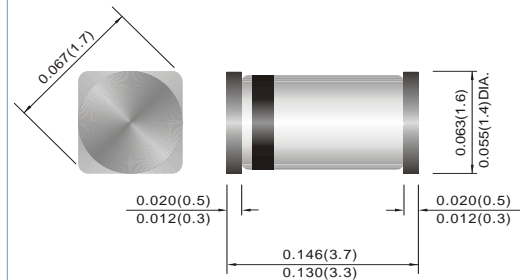
- Fast switching Speed.
- Surface Mount Package Ideally Suited For Automatic Insertion.
- Silicon Epitaxial Planar Construction.
- Lead free in comply with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: QUADRO Melf, Glass
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band
- Marking: Cathode Band Only
- Weight: 0.03 grams
- Packing information

T/R - 2.5K per 7" plastic reel

T/R - 10K per 13" plastic reel



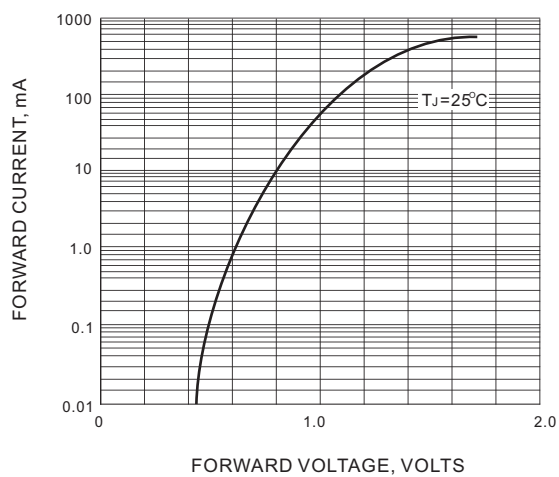
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>J</sub>=25°C unless otherwise noted)

| PARAMETER  | SYMBOL                          | LS4150      | UNITS  |
|--|---------------------------------|-------------|--------|
| Reverse Voltage  | V <sub>R</sub>                  | 50          | V      |
| Peak Reverse Voltage   | V <sub>RM</sub>                 | 50          | V      |
| RMS Voltage  | V <sub>RMS</sub>                | 35          | V      |
| Maximum Average Forward Current at T <sub>A</sub> =25°C And f ≥ 50Hz | I <sub>F(AV)</sub>              | 200         | 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> =200mA                     | V <sub>F</sub>                  | 1.0         | V      |
| Maximum Leakage Current at V <sub>R</sub> = 50V                      | I <sub>R</sub>                  | 0.1         | 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     |

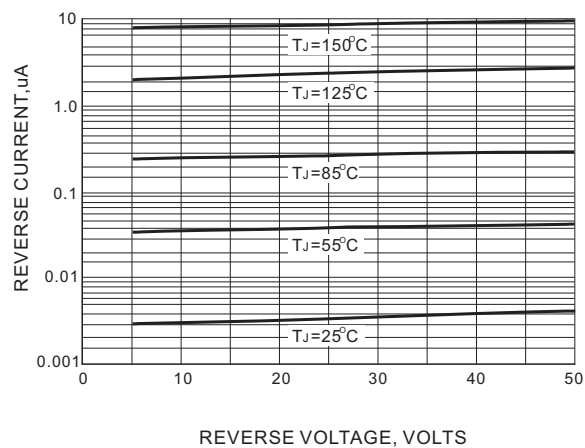
### NOTE:

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

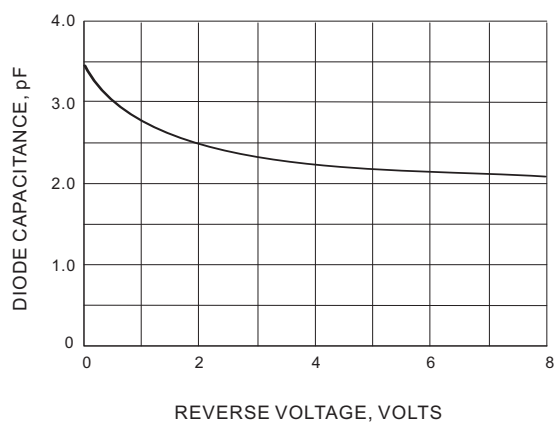
# LS4150



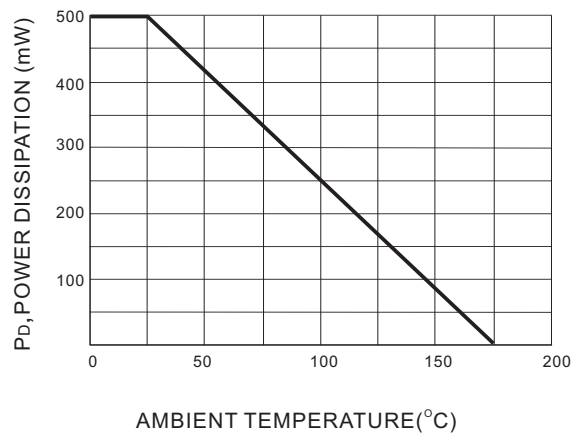
FORWARD VOLTAGE



LEAKAGE CURRENT



TYPICAL CAPATICANCE



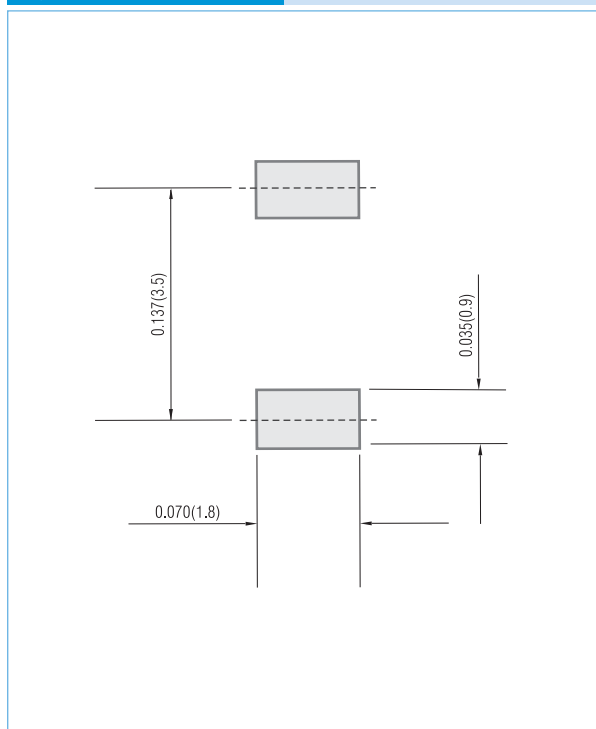
POWER DERATING

# LS4150

## MOUNTING PAD LAYOUT

### QUADRO-MELF

Unit: inch ( mm )



## ORDER INFORMATION

- Packing information

T/R - 10K per 13" plastic Reel

T/R - 2.5K per 7" plastic Reel

# LS4150

## Part No\_packing code\_Version

LS4150\_R1\_10001

LS4150\_R2\_10001

For example :

**RB500V-40\_R2\_00001**

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

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

## LS4150

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