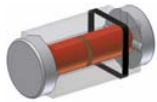
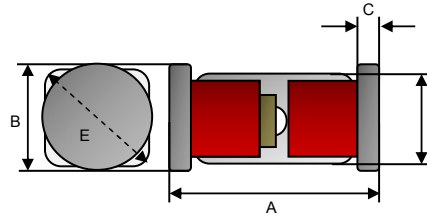


Small Signal Diode



QUADRO Mini-MELF (LS34)
HERMETICALLY SEALED GLASS



Features

- ✧ Fast switching device ($T_{rr} < 4.0\text{nS}$)
- ✧ Surface device type mounting
- ✧ Moisture sensitivity level 1
- ✧ Matte Tin(Sn) lead finish with Nickel(Ni) underplate
- ✧ Pb free version and RoHS compliant
- ✧ All External Surfaces are Corrosion Resistant and Leads are Readily Solderable

Mechanical Data

- ✧ Case : QUADRO Mini-MELF Package (JEDEC DO-213)
- ✧ High temperature soldering guaranteed : 270°C/10s
- ✧ Polarity : Indicated by cathode band
- ✧ Weight : 29 ± 2.5 mg

| Dimensions | Unit (mm) | | Unit (inch) | |
|------------|-----------|------|-------------|-------|
| | Min | Max | Min | Max |
| A | 3.30 | 3.70 | 0.130 | 0.146 |
| B | 1.40 | 1.60 | 0.055 | 0.063 |
| C | 0.25 | 0.40 | 0.010 | 0.016 |
| D | 1.25 | 1.40 | 0.049 | 0.055 |
| E | 1.80 | | 0.071 | |

Ordering Information

| Part No. | Package | Packing |
|----------|------------------|-------------------|
| LSxxx L1 | QUADRO Mini-MELF | 2.5Kpcs / 7" Reel |
| LSxxx L0 | QUADRO Mini-MELF | 10Kpcs / 13" Reel |

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

| Type Number | Symbol | Value | Units |
|---|----------------|--------------|-------|
| Power Dissipation | P_D | 500 | mW |
| Non-Repetitive Peak Reverse Voltage | V_{RSM} | 100 | V |
| Repetitive Peak Reverse Voltage | V_{RRM} | 75 | V |
| Peak Forward Surge Current | I_{FSM} | 2 | A |
| Non-Repetitive Peak Forward Current | I_{FM} | 450 | mA |
| Mean Forward Current | I_o | 150 | mA |
| Thermal Resistance (Junction to Ambient) (Note 1) | $R\theta_{JA}$ | 300 | °C/W |
| Junction and Storage Temperature Range | T_J, T_{STG} | -65 to + 200 | °C |

Electrical Characteristics

| Type Number | Symbol | Min | Max | Units | |
|--------------------------------|------------|--|------|-------|----|
| Reverse Breakdown Voltage | $V_{(BR)}$ | $I_R=100\mu A$ | 100 | - | V |
| | | $I_R=5\mu A$ | 75 | - | |
| Forward Voltage | V_F | LS4448, LS914B $I_F=5.0\text{mA}$ | 0.62 | 0.72 | V |
| | | LS4148 $I_F=10.0\text{mA}$ | - | 1.0 | |
| | | LS4448, LS914B $I_F=100.0\text{mA}$ | - | 1.0 | |
| Reverse Leakage Current | I_R | $V_R=20\text{V}$ | - | 25 | nA |
| | | $V_R=75\text{V}$ | - | 5.0 | μA |
| Junction Capacitance | C_J | - | 4.0 | pF | |
| Reverse Recovery Time (Note 2) | T_{rr} | - | 4.0 | ns | |

Notes:1. Valid provided that electrodes are kept at ambient temperature

Notes:2. Reverse Recovery Test Conditions: $I_F=I_R=10\text{mA}$, $R_L=100\Omega$, $I_{RR}=1\text{mA}$

Small Signal Diode

Rating and Sharacteristic Curves

FIG 1 Typical Forward Characteristics

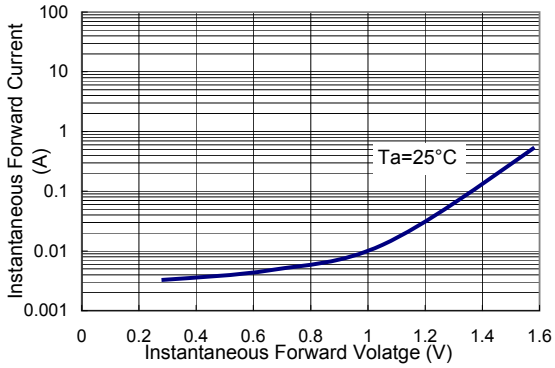


FIG 2 Reverse Current vs Reverse Voltage

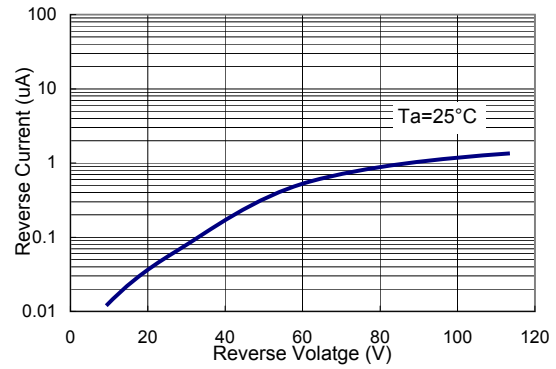


FIG 3 Admissible Power Dissipation Curve

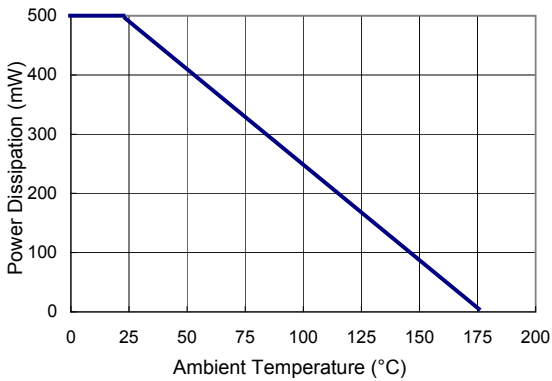


FIG 4 Typical Junction Capacitance

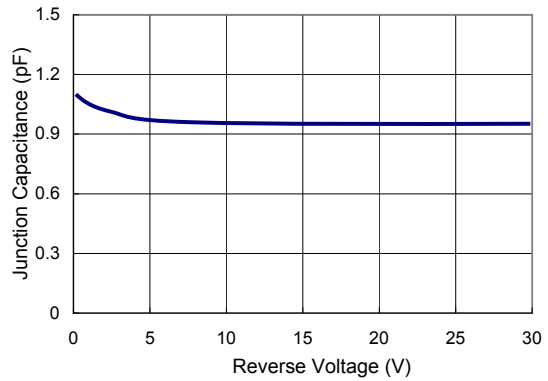


FIG 5 Forward Resistance vs. Forward Current

