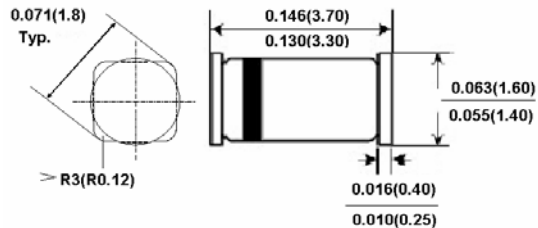
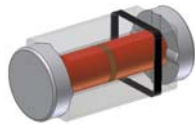


# LS4448 /LS4148/LS914B

## 500mW Hermetically Sealed Glass Fast Switching Diodes

### QUADRO MINI MELF



Dimensions in inches and (millimeters)

### Features

- ✧ Fast switching device ( $T_{RR} < 4.0\text{nS}$ )
- ✧ Quadro Mini-MELF package
- ✧ Surface device type mounting
- ✧ Hermetically sealed glass
- ✧ Compression bonded construction
- ✧ All external surfaces are corrosion resistant and leads are readily solderable
- ✧ RoHS compliant
- ✧ Matte Tin (Sn) lead finish
- ✧ 1<sup>st</sup> band indicates cathode

### 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
Working Inverse Voltage	$W_{IV}$	75	V
Non-repetitive Peak Forward Current	$I_{FM}$	450	mA
Average Rectified Current	$I_o$	150	mA
Peak Forward Surge Current	$I_{FSURGE}$	2	A
Operating Junction Temperature	$T_J$	175	°C
Storage Temperature Range	$T_{STG}$	-65 to + 200	°C

#### Electrical Characteristics

Type Number	Symbol	Min	Max	Units
Breakdown Voltage $I_R=100\mu\text{A}$ $I_R=5\mu\text{A}$	$B_V$	100 75		V
Forward Voltage LS4448, LS914B $I_F=5.0\text{mA}$ LS4148 $I_F=10\text{mA}$ LS4448, LS914B $I_F=100\text{mA}$	$V_F$	0.62	0.72 1.0 1.0	V
Reverse Leakage Current $V_R=20\text{V}$ $V_R=75\text{V}$	$I_R$		25 5	nA uA
Junction Capacitance $V_R=0, f=1.0\text{MHz}$	$C_j$	-	4.0	pF
Reverse Recovery Time (Note 1)	$t_{rr}$	-	4.0	nS

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

RATINGS AND CHARACTERISTIC CURVES (LS4448/LS4148/LS914B)

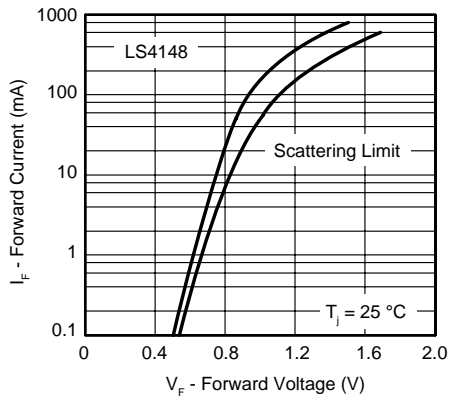


Figure 1. Forward Current vs. Forward Voltage

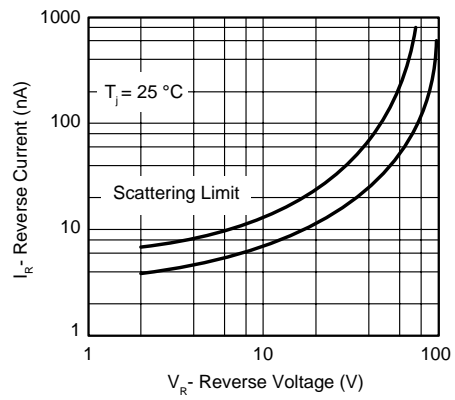


Figure 3. Reverse Current vs. Reverse Voltage

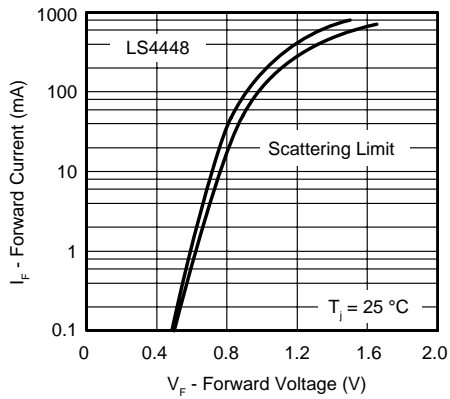


Figure 2. Forward Current vs. Forward Voltage

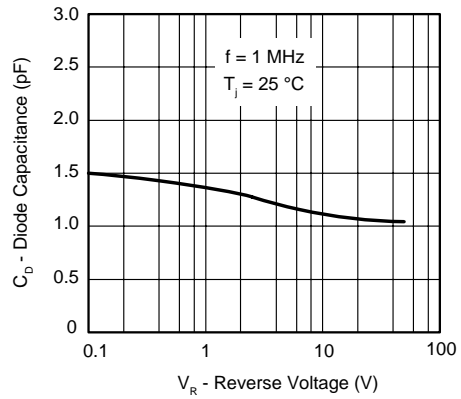


Figure 4. Diode Capacitance vs. Reverse Voltage