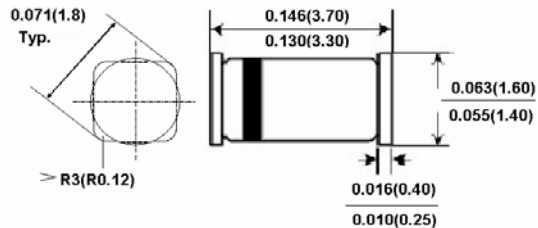
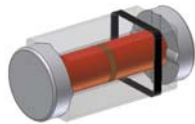


LS4448 /LS4148/LS914B

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
- ✧ 1st 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)

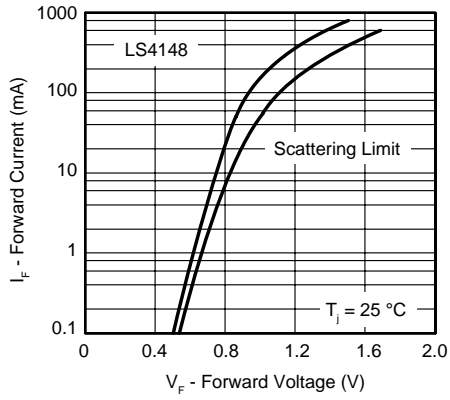


Figure 1. Forward Current vs. Forward Voltage

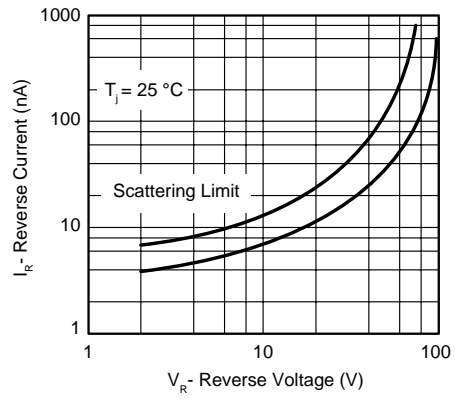


Figure 3. Reverse Current vs. Reverse Voltage

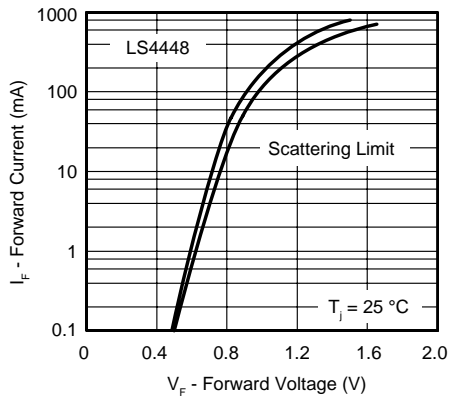


Figure 2. Forward Current vs. Forward Voltage

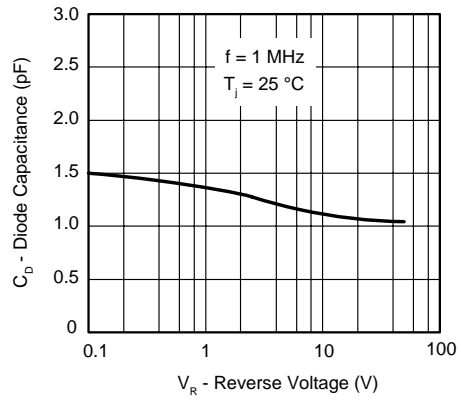


Figure 4. Diode Capacitance vs. Reverse Voltage