



## 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 at Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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	
Peak Forward Surge Current	$I_{FSURGE}$	2	A
Operating Junction Temperature	$T_J$	175	°C
Storage Temperature Range	$T_{STG}$	-65 to +200	°C

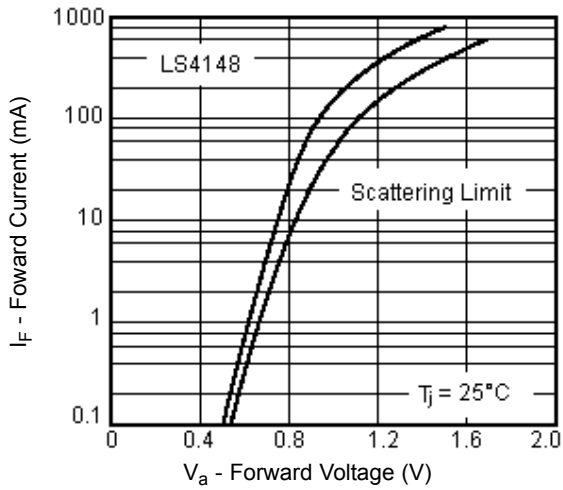
## Electrical Characteristics

Type Number	Symbol	Minimum	Maximum	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	
Reverse Leakage Current $V_R = 20\text{V}$ $V_R = 75\text{V}$	$I_R$	-	25 5	
Junction Capacitance $V_R = 0, f = 1.0\text{MHz}$	$C_j$	-	4.0	pF
Reverse Recovery Time (Note 1)	$t_{rr}$	-		nS

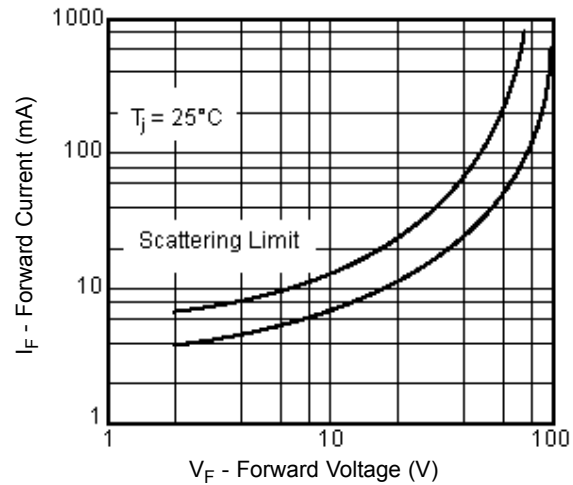
**Notes:** 1. Reverse Recovery Test Conditions:  $I_F = I_R = 10\text{mA}$ ,  $R_L = 100\Omega$ ,  $I_{RR} = 1\text{mA}$ .

## Ratings and Characteristic Curves (LS4448/LS4148/LS914B)

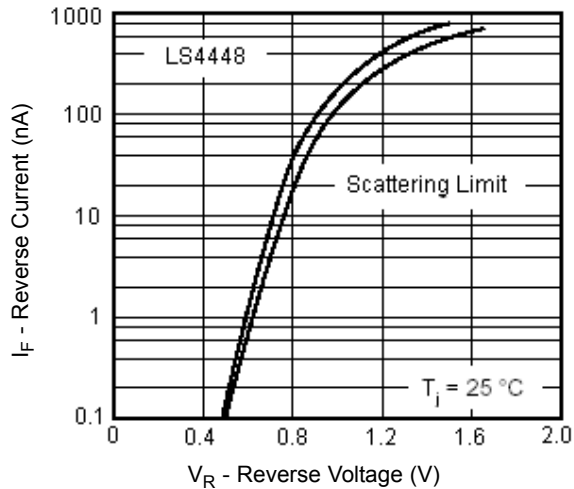
Forward Current vs. Forward Voltage



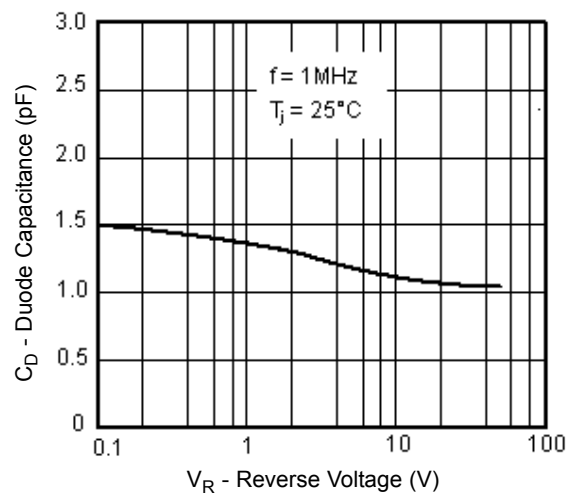
Forward Current vs. Forward Voltage



Reverse Current vs. Reverse Voltage



Diode Capacitance vs. Reverse Voltage



### Part Number Table

Description	Part Number
Diode, High Speed, Quadro Melf	LS4148
Diode, High Speed, Quadro Melf	LS4448
Diode, High Speed, Quadro Melf	LS914B

## Notes:

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