

LS4448PF

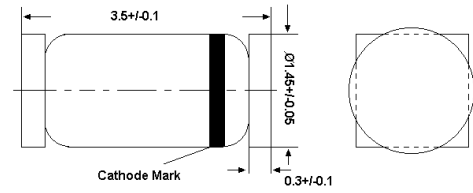
Silicon Epitaxial Planar Switching Diode

Fast switching diode in QuadroMELF case especially suited for automatic surface mounting. Identical electrically to standard JEDEC 1N4448.

Features

- Lead Free

LS-34



QuadroMELF
Dimensions in mm

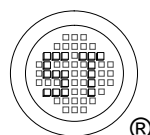
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Average Rectified Forward Current	$I_{F(AV)}$	150	mA
Surge Forward Current at $t < 1$ s	I_{FSM}	500	mA
Power Dissipation	P_D	500	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 175	$^\circ\text{C}$

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient ¹⁾	$R_{\theta JA}$	300	$^\circ\text{C/W}$

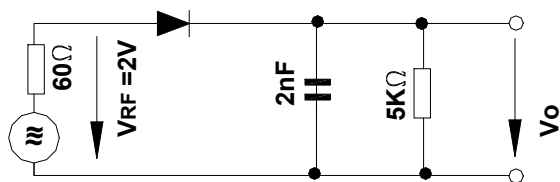
¹⁾ Valid provided that electrodes are kept at ambient temperature.



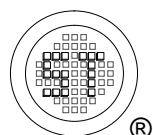
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Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 5 \text{ mA}$ at $I_F = 100 \text{ mA}$	V_F	0.62 -	0.72 1	V
Reverse Current at $V_R = 20 \text{ V}$ at $V_R = 75 \text{ V}$	I_R	- -	25 5	nA μA
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	100	-	V
Capacitance at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$	C_{tot}	-	4	pF
Reverse Recovery Time at $I_F = 10 \text{ mA}$ to $I_R = 1 \text{ mA}$, $V_R = 6 \text{ V}$, $R_L = 100 \Omega$	t_{rr}	-	4	ns



Rectification Efficiency Measurement Circuit



Electrical Characteristics Curve

Fig 1. Power Derating Curve

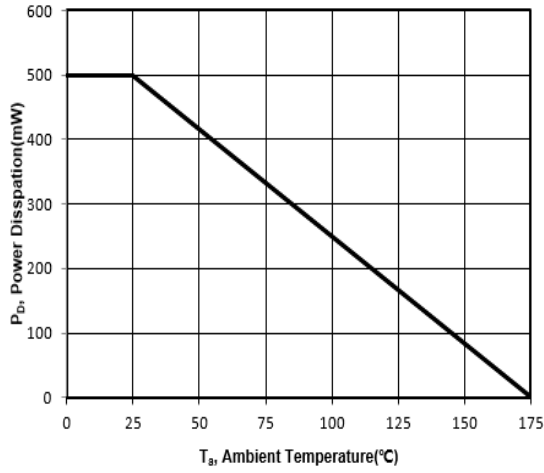


Fig 2. Forward Characteristic Curve

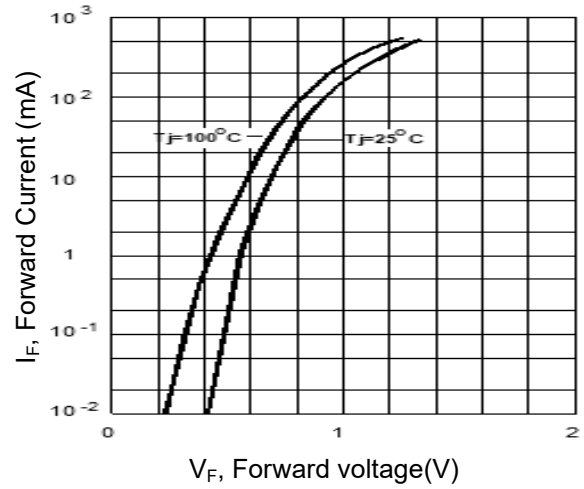


Fig 3. Reverse Characteristic Curve

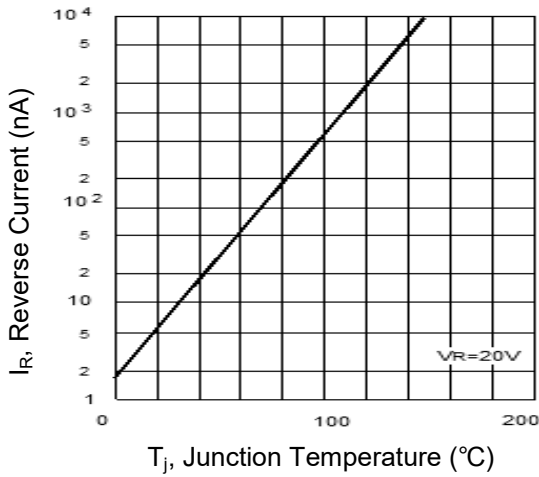


Fig 4. Junction Capacitance

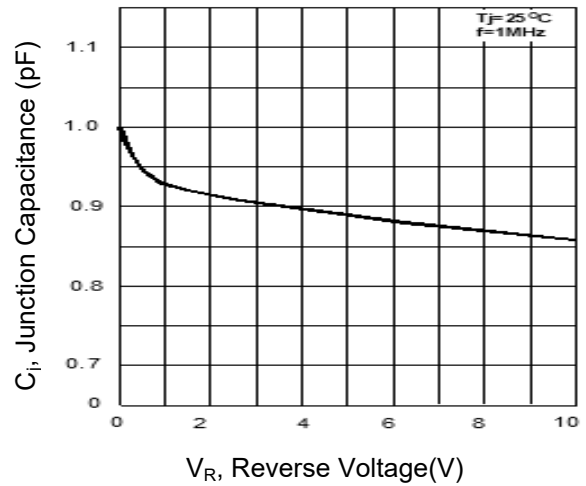
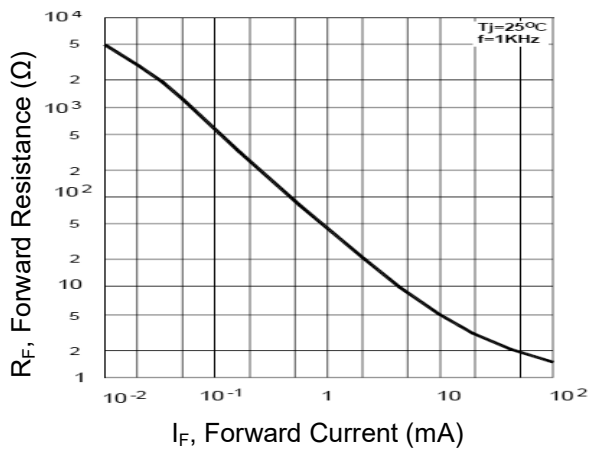


Fig 5. Forward Resistance



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