

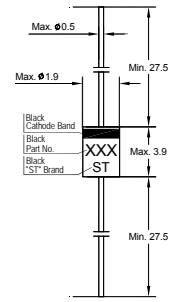
# 1N4448

## Silicon Epitaxial Planar Switching Diode

### Applications

- High-speed switching

This diode is also available in MiniMELF case with the type designation LL4448.



Glass Case DO-35  
Dimensions in mm

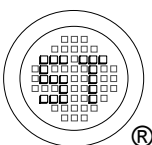
### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

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	$P_{tot}$	500 <sup>1)</sup>	mW
Junction Temperature	$T_j$	200	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 200	$^\circ\text{C}$

<sup>1)</sup> Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 5$ mA at $I_F = 100$ mA	$V_F$	0.62 -	0.72 1	V
Reverse Leakage Current at $V_R = 20$ V at $V_R = 75$ V at $V_R = 20$ V, $T_j = 150^\circ\text{C}$	$I_R$ $I_R$ $I_R$	- - -	25 5 50	nA $\mu\text{A}$ $\mu\text{A}$
Reverse Breakdown Voltage at $I_R = 100$ $\mu\text{A}$	$V_{(BR)R}$	100	-	V
Capacitance at $V_R = 0$ , $f = 1$ MHz	$C_{tot}$	-	4	pF
Reverse Recovery Time at $I_F = 10$ mA to $I_R = 1$ mA, $V_R = 6$ V, $R_L = 100$ $\Omega$	$t_{rr}$	-	4	ns



**SEMTECH ELECTRONICS LTD.**  
Subsidiary of Sino-Tech International (BVI) Limited



Dated : 15/06/2009

