

### FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

### MAXIMUM RATINGS

Parameter	Symbol	Conditions	Min	Max	Unit
Repetitive peak reverse voltage	$V_{RRM}$		-	100	V
Continuous reverse voltage	$V_R$		-	100	V
Continuous forward current <sup>(1)</sup>	$I_F$		-	200	mA
Repetitive peak forward current	$I_{FRM}$			450	mA
Non-repetitive peak forward current	$I_{FSM}$	Square wave; $T_J = 25^\circ\text{C}$ prior to surge $t = 1\mu\text{s}$ $t = 1\text{ms}$ $t = 1\text{s}$	- - -	4 1 0.5	A
Storage temperature	$T_{stg}$		-65	+200	$^\circ\text{C}$
Junction temperature	$T_J$		-	200	$^\circ\text{C}$

Note 1: Device mounted on a FR4 printed-circuit board; lead length 10mm

### ELECTRICAL CHARACTERISTICS (@ $T_J = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Conditions	Min	Max	Unit
Forward voltage	$V_F$	$I_F = 5\text{mA}$ $I_F = 100\text{mA}$	0.62 -	0.72 1	V
Reverse current	$I_R$	$V_R = 20\text{V}$	-	25	nA
Reverse current	$I_R$	$V_R = 20\text{V}$ , $T_J = 100^\circ\text{C}$	-	3	$\mu\text{A}$
Reverse current	$I_R$	$V_R = 20\text{V}$ , $25^\circ\text{C}$ $I_R$ , $T_J = 150^\circ\text{C}$	-	50	$\mu\text{A}$
Diode capacitance	$C_d$	$f = 1\text{MHz}$ , $V_R = 0\text{V}$	-	4	pF
Reverse recovery time	$t_{rr}$	When switched from $I_F = 10\text{mA}$ to $I_R = 60\text{mA}$ , $R_L = 100\Omega$ measured at $I_R = 1\text{mA}$	-	4	ns
Forward recovery voltage	$V_{fr}$	When switched from $I_F = 50\text{mA}$ , $t_r = 20\text{ns}$	-	2.5	V

### THERMAL CHARACTERISTICS

Parameter	Symbol	Conditions	Value	Unit
Thermal resistance junction to tie-point	$R_{th(j-tp)}$	Lead length 10mm	240	K/W
Thermal resistance from junction to ambient	$R_{th(j-a)}$	Lead length 10mm <sup>(1)</sup>	350	K/W

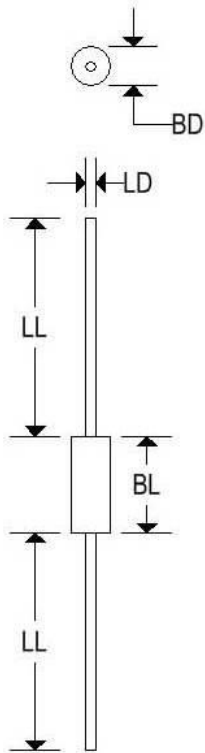
Note 1: Device mounted on a printed-circuit board without metallization pad.

# 1N4448

## SILICON SWITCHING DIODE

### MECHANICAL CHARACTERISTICS

<b>Case:</b>	DO-35
<b>Marking:</b>	Alpha-numeric
<b>Polarity:</b>	Cathode band



	DO-35			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	0.055	0.090	1.400	2.290
BL	0.120	0.200	3.050	5.080
LD	0.018	0.022	0.460	0.560
LL	1.000	1.500	25.400	38.100