

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 ⁽¹⁾	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_{str}		-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	μA
Reverse current	I_R	$V_R = 20\text{V}, T_J = 100^\circ\text{C}$	-	3	μA
Reverse current	I_R	$V_R = 20\text{V}, 25^\circ\text{C}$ $I_R, T_J = 150^\circ\text{C}$	-	50	μA
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 ⁽¹⁾	350	K/W

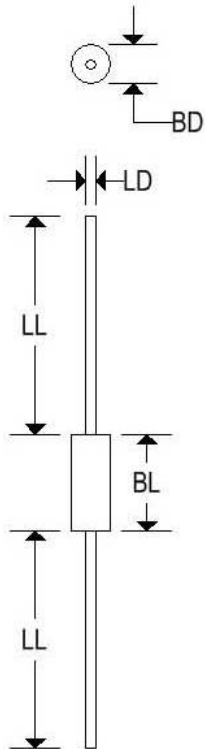
Note 1: Device mounted on a printed-circuit board without metallization pad.

1N4448

SILICON SWITCHING DIODE

MECHANICAL CHARACTERISTICS

Case:	DO-35
Marking:	Alpha-numeric
Polarity:	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