

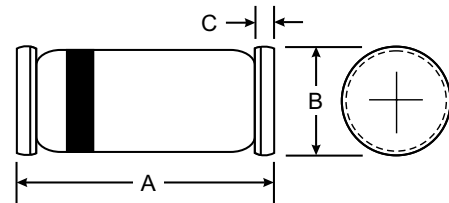


Features

- Silicon Planar Diode

Mechanical Data

- Case: SOD-80/LL34
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.05 grams
- Marking: Cathode Band Only



LL34/ SOD-80		
Dim	Min	Max
A	3.30	3.70
B	1.30	1.60
C	0.28	0.50
All Dimensions in mm		

Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Peak reverse voltage, non repetitive		V_{RSM}	80	V
Reverse voltage		V_R	50	V
Peak forward surge current	$t_p = 1 \mu\text{s}$	I_{FSM}	2	A
Repetitive peak forward current		I_{FRM}	450	mA
Forward continuous current		I_F	200	mA
Power dissipation		P_V	500	mW

Thermal Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Thermal resistance junction to ambient air	on PC board 50 mm x 50 mm x 1.6 mm	R_{thJA}	500	K/W
Junction lead	$T_L = \text{constant}$	R_{thJL}	350	K/W
Junction temperature		T_j	175	$^\circ\text{C}$
Storage temperature range		T_{stg}	- 55 to + 175	$^\circ\text{C}$

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Test condition	Symbol	Min	Typ.	Max	Unit
Forward voltage	$I_F = 50 \text{ mA}$	V_F			1100	mV
Reverse current	$V_R = 50 \text{ V}$	I_R			1	μA
	$V_R = 20 \text{ V}$	I_R			50	nA
	$V_R = 20 \text{ V}, T_j = 150^\circ\text{C}$	I_R			50	μA
Breakdown voltage	$I_R = 100 \mu\text{A}$	$V_{(BR)}$	80			V
Reverse recovery time	$I_F = 10 \text{ mA}, I_R = 10 \text{ mA},$ $i_R = 1 \text{ mA}$	t_{rr}			20	ns
Diode capacitance	$V_R = 0, f = 1 \text{ MHz}$	C_D			4	pF