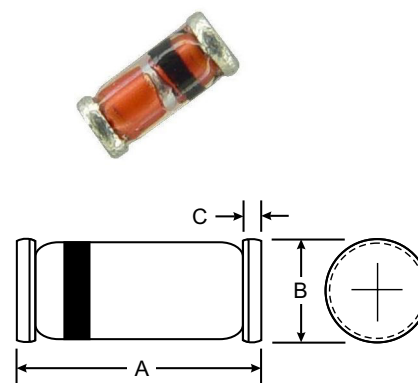


Features

- Silicon Epitaxial Planar Diodes
- Micro Melf package

Mechanical Data

- Case: SOD-80/LL34, Glass
- Terminals: Solderable per MIL-STD-202,
- Method 208
- Polarity: Cathode Band
- Weight: 0.05 grams (approx.)



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
Repetitive peak reverse voltage		V_{RRM}	35	V
Reverse voltage		V_R	25	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
Average forward current	$V_R = 0$	I_{FAV}	150	mA
Power dissipation		P_{tot}	500	mW

Thermal Characteristics $T_{amb} = 25^\circ\text{C}$, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Junction to ambient air	mounted on epoxy-glass hard tissue, Fig. 4, 35 μm copper clad, 0.9 mm^2 copper area per electrode	R_{thJA}	500	K/W
Junction temperature		T_j	175	$^\circ\text{C}$
Storage temperature range		T_{stg}	- 65 to + 175	$^\circ\text{C}$

Electrical Characteristics $T_{amb} = 25^\circ\text{C}$, unless otherwise specified

Parameter	Test condition	Symbol	Min	Typ.	Max	Unit
Forward voltage	$I_F = 30 \text{ mA}$	V_F			1000	mV
Reverse current	$V_R = 25 \text{ V}$	I_R			100	nA
	$V_R = 25 \text{ V}, T_j = 150^\circ\text{C}$	I_R			100	μA
Breakdown voltage	$I_R = 5 \mu\text{A}, t_p/T = 0.01, t_p = 0.3 \text{ ms}$	$V_{(BR)}$	35			V
Diode capacitance	$V_R = 0, f = 1 \text{ MHz}, V_{HF} = 50 \text{ mV}$	C_D			4	pF
Reverse recovery time	$I_F = I_R = 10 \text{ mA}, i_R = 1 \text{ mA}$	t_{rr}			4	ns
	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}, i_R = 0.1 \times I_R, R_L = 100 \Omega$	t_{rr}			2	ns

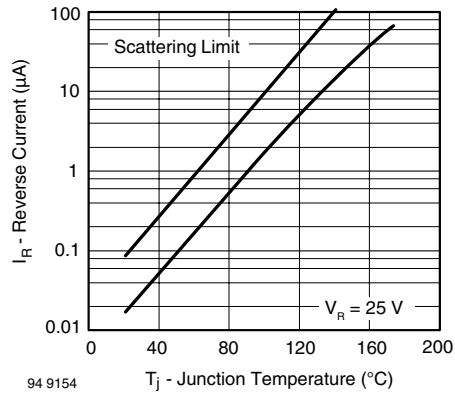


Figure 1. Reverse Current vs. Junction Temperature

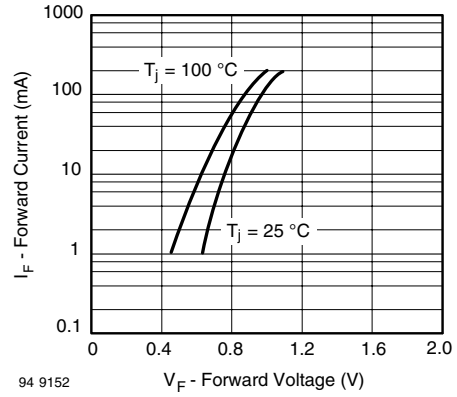


Figure 2. Forward Current vs. Forward Voltage

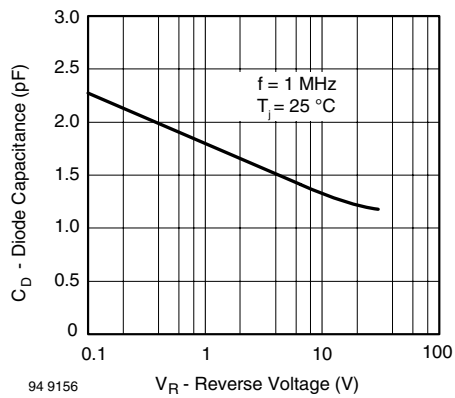


Figure 3. Diode Capacitance vs. Reverse Voltage

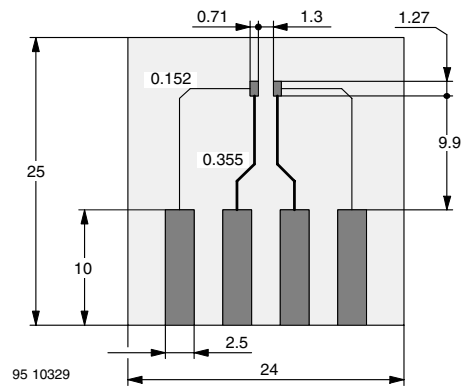


Figure 4. Board for R_{thJA} definition (in mm)