

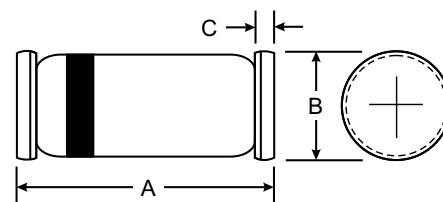


Features

- Fast Switching Speed
- Glass Package Version for High Reliability
- High Conductance
- Available in Both Through-Hole and Surface Mount Versions

Mechanical Data

- Case: LL34 (SOD-80)
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: MiniMELF 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 and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	75	V
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current (Note 1)	I _{FM}	300	mA
Rectified Current (Average), Half Wave Rectification with Resistive Load and f ≥ 50MHz (Note 1)	I _O	150	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0s @ t = 1.0μs	I _{FSM}	1.0 2.0	A
Power Dissipation (Note 1) Derate Above 25°C	P _d	500 1.68	mW mW/°C
Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	300	K/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175	°C

Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Maximum Forward Voltage	V _{FM}	—	1.0	V	I _F = 10mA
Maximum Peak Reverse Current	I _{RM}	—	5.0 50 30 25	μA μA μA nA	V _R = 75V V _R = 70V, T _J = 150°C V _R = 20V, T _J = 150°C V _R = 20V
Capacitance	C _J	—	4.0	pF	V _R = 0, f = 1.0MHz
Reverse Recovery Time	t _{rr}	—	4.0	ns	I _F = 10mA to I _R = 1.0mA V _R = 6.0V, R _L = 100Ω

Note: 1. Diode on Ceramic Substrate 10mm x 8mm x 0.7mm.

Characteristics ($T_j = 25^\circ\text{C}$ unless otherwise specified)

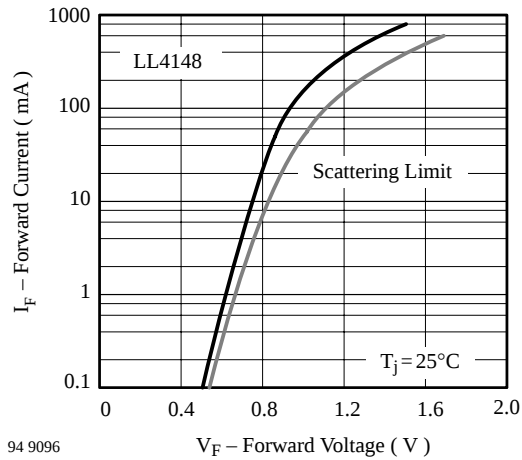


Figure 1. Forward Current vs. Forward Voltage

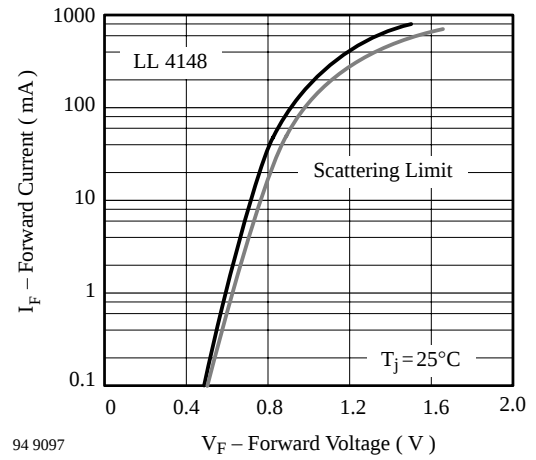


Figure 2. Forward Current vs. Forward Voltage

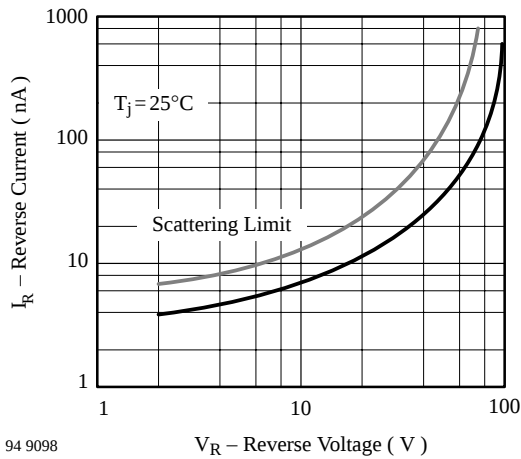


Figure 3. Reverse Current vs. Reverse Voltage

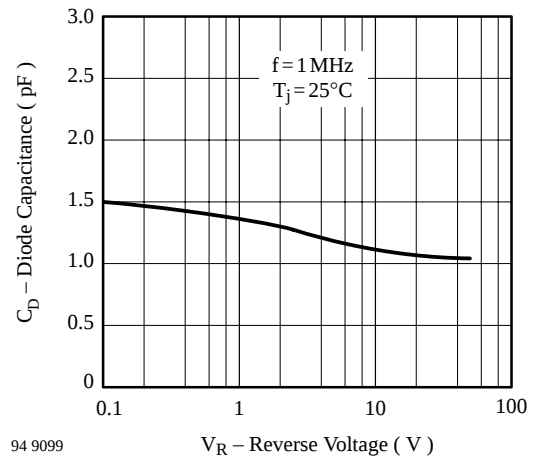


Figure 4. Diode Capacitance vs. Reverse Voltage