

Features

- Integrated protection ring against static discharge
- Low capacitance
- Low leakage current
- Low forward voltage drop

Mechanical Data

- Case: LL34 (SOD-80)
- 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		

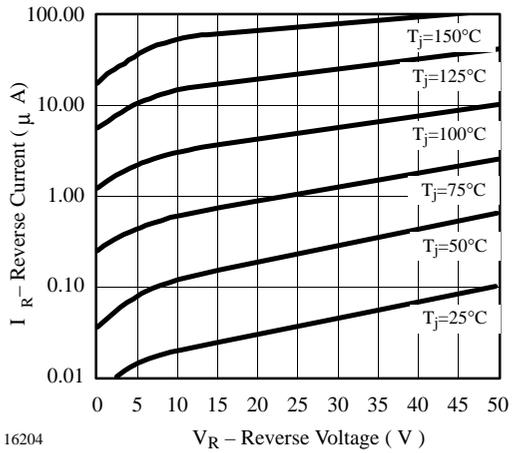
Maximum Ratings @ T_A = 25°C unless otherwise specified

Parameter	Test Conditions	Type	Symbol	Value	Unit
Reverse voltage		MCL101A	V _R	60	V
		MCL101B	V _R	50	V
		MCL101C	V _R	40	V
Peak forward surge current	t _p =10μs		I _{FSM}	2	A
Repetitive peak forward current			I _{FRM}	150	mA
Forward current			I _F	30	mA
Junction temperature			T _j	125	°C
Storage temperature range			T	-65...+150	°C

Electrical Characteristics

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage	I _R =10μA	MCL101A	V _{(BR)R}	60			V
		MCL101B		50			V
		MCL101C		40			V
Leakage current	V _R = 50 V	MCL101A	I _R			200	nA
	V _R = 40 V	MCL101B				200	nA
	V _R = 30 V	MCL101C				200	nA
Forward voltage drop	I _F =1mA	MCL101A	V _F			0.41	V
		MCL101B				0.4	V
		MCL101C				0.39	V
	I _F =15mA	MCL101A	V _F			1	V
		MCL101B				0.95	V
		MCL101C				0.9	V
Diode capacitance	V _R = 0 V, f= 1MHz	MCL101A	C _D			2.0	pF
		MCL101B				2.1	pF
		MCL101C				2.2	pF

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



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Figure 1. Reverse Current vs. Reverse Voltage

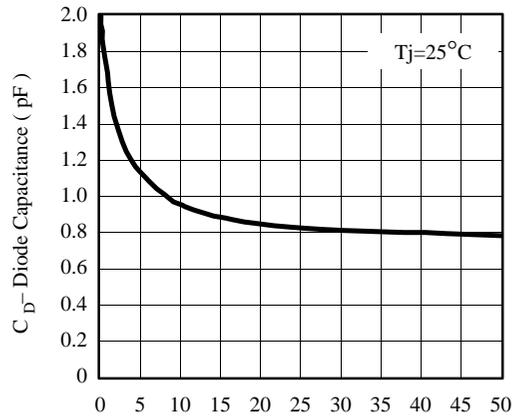
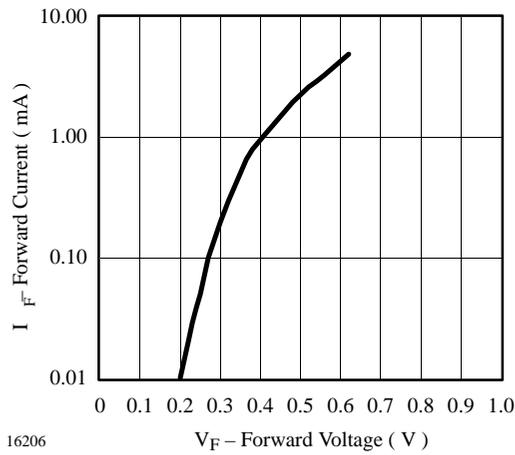


Figure 2. Diode Capacitance vs. Reverse Voltage



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Figure 3. Forward Current vs. Forward Voltage