

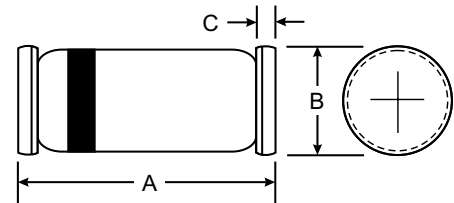


### Features

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

### 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<sub>A</sub> = 25°C unless otherwise specified

Parameter	Test Conditions	Type	Symbol	Value	Unit
Reverse voltage		MCL101A	V <sub>R</sub>	60	V
		MCL101B	V <sub>R</sub>	50	V
		MCL101C	V <sub>R</sub>	40	V
Peak forward surge current	t <sub>p</sub> =10μs		I <sub>FSM</sub>	2	A
Repetitive peak forward current			I <sub>FRM</sub>	150	mA
Forward current			I <sub>F</sub>	30	mA
Junction temperature			T <sub>j</sub>	125	°C
Storage temperature range			T	-65...+150	°C

### Electrical Characteristics

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

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

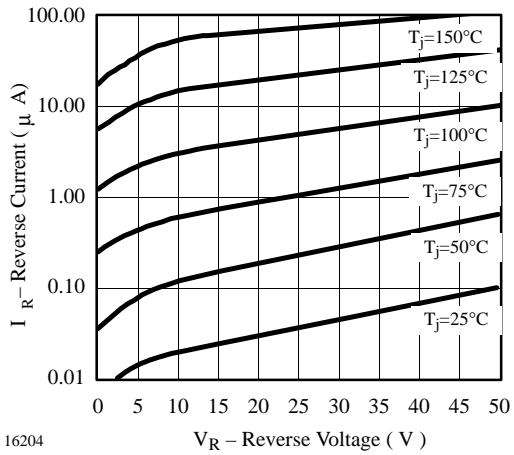


Figure 1. Reverse Current vs. Reverse Voltage

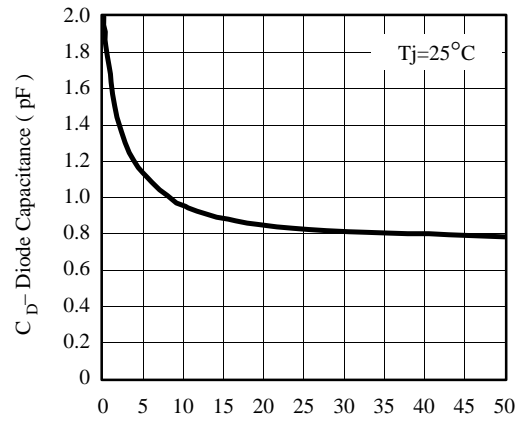


Figure 2. Diode Capacitance vs. Reverse Voltage

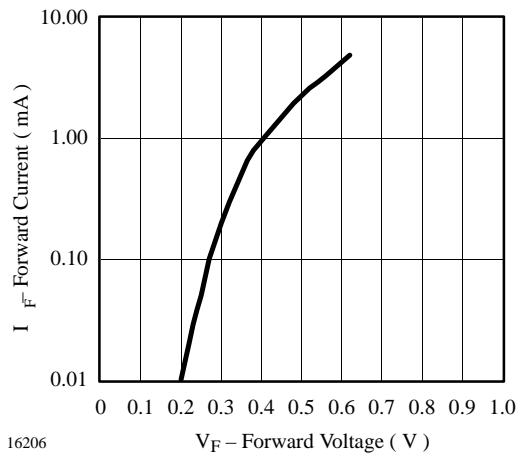


Figure 3. Forward Current vs. Forward Voltage