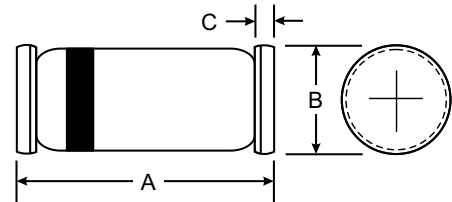




Features

- 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 and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	LL101A LL101B LL101C	60 50 40	V
Maximum Single Cycle Surge 10μs Square Wave	I_{FSM}	2	A
Power Dissipation (Infinite Heatsink)	P_D	400 ⁽¹⁾	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	300 ⁽¹⁾	°C/W
Junction Temperature	T_J	125 ⁽¹⁾	°C
Storage temperature range	T_S	-55 to + 150 ⁽¹⁾	°C

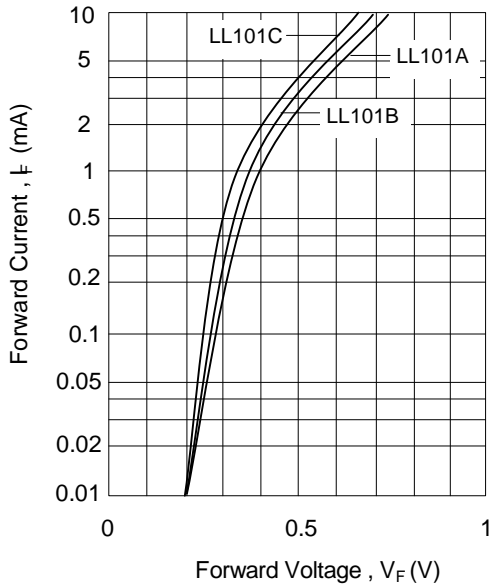
Note: (1) Valid provided that electrodes are kept at ambient temperature.

Electrical Characteristics ($T_J = 25^\circ\text{C}$ unless otherwise noted)

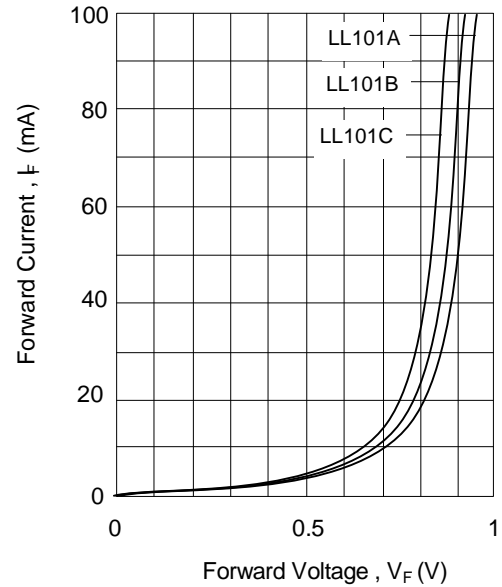
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	LL101A LL101B LL101C	$V_{(BR)R}$ $I_R = 10 \mu\text{A}$	60 50 40	- - -	- - -	V
Reverse Current	LL101A LL101B LL101C	I_R $V_R = 50 \text{ V}$ $V_R = 40 \text{ V}$ $V_R = 30 \text{ V}$	- - -	- - -	10 10 10	μA
Forward Voltage Drop	LL101A LL101B LL101C	V_F $I_F = 1 \text{ mA}$	- - -	- - -	0.41 0.40 0.39	V
	LL101A LL101B LL101C	V_F $I_F = 15 \text{ mA}$	- - -	- - -	1.00 0.95 0.90	V
Reverse Recovery Time	T_{rr}	$I_F = I_R = 5 \text{ mA}$, recover to $0.1 I_R$	-	-	1.0	ns

RATING AND CHARACTERISTIC CURVES (LL101A - LL101C)

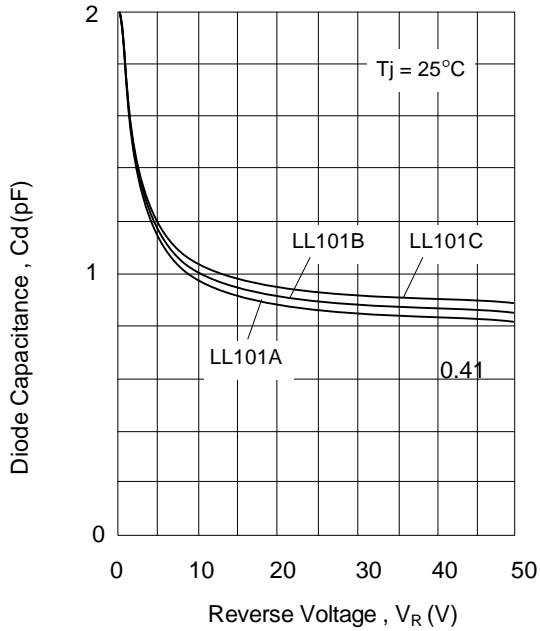
Typical variation of forward current and forward voltage for primary conduction through the schottky barrier



Typical forward conduction curve of combination Schottky barrier and PN junction guard ring



Typical capacitance curve as a function of reverse Voltage



Typical variation of reverse current at various temperatures

