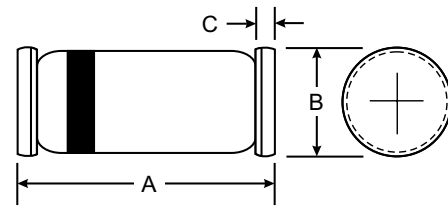


Features

- Integrated protection ring against static discharge
- Low capacitance
- Low leakage current
- Low forward voltage drop
- Lead (Pb)-free component
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



Mechanical Data

- **Case:** SOD-80 Glass case
- **Weight:** approx. 34 mg
- **Cathode Band Color:** Black
- **Packaging Codes/Options:**
GS18 / 10 k per 13" reel (8 mm tape), 10 k/box
GS08 / 2.5 k per 7" reel (8 mm tape), 12.5 k/box



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 @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Test condition	Part	Symbol	Value	Unit		
Reverse voltage		LS101A	V_R	60	V		
		LS101B	V_R	50	V		
		LS101C	V_R	40	V		
Peak forward surge current	$t_p = 10 \mu s$		I_{FSM}	2	A		
Repetitive peak forward current			I_{FRM}	150	mA		
Forward continuous current			I_F	30	mA		
Parameter	Test condition	Part	Symbol	Min	Typ.	Max	Unit
Reverse Breakdown Voltage	$I_R = 10 \mu A$	LS101A	$V_{(BR)R}$	60			V
		LS101B	$V_{(BR)R}$	50			V
		LS101C	$V_{(BR)R}$	40			V
Leakage current	$V_R = 50 \text{ V}$	LS101A	I_R			200	nA
	$V_R = 40 \text{ V}$	LS101B	I_R			200	nA
	$V_R = 30 \text{ V}$	LS101C	I_R			200	nA
Forward voltage drop	$I_F = 1 \text{ mA}$	LS101A	V_F			410	mV
		LS101B	V_F			400	mV
		LS101C	V_F			390	mV
	$I_F = 15 \text{ mA}$	LS101A	V_F			1000	mV
		LS101B	V_F			950	mV
		LS101C	V_F			900	mV
Diode capacitance	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$	LS101A	C_D			2.0	pF
		LS101B	C_D			2.1	pF
		LS101C	C_D			2.2	pF

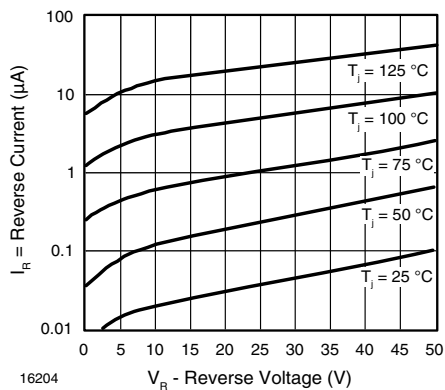


Figure 1. Reverse Current vs. Reverse Voltage

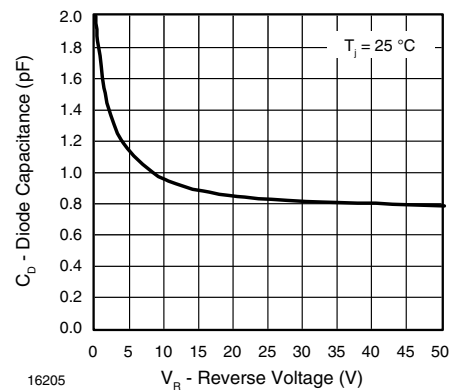


Figure 2. Diode Capacitance vs. Reverse Voltage

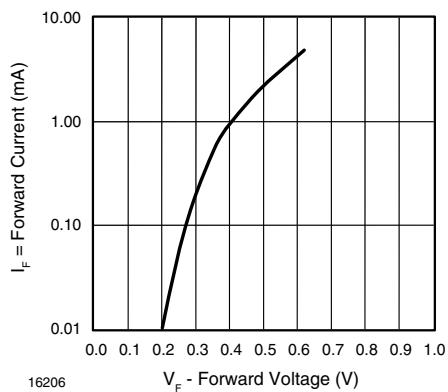


Figure 3. Forward Current vs. Forward Voltage