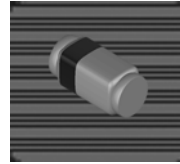


### Features

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



### Applications

HF-Detector  
 Protection circuit  
 Diode for low currents with a low supply voltage  
 Small battery charger  
 Power supplies  
 DC / DC converter for notebooks

### Mechanical Data

- Case: QuadroMELF Glass Case (SOD-80)
- Weight: approx. 34 mg
- Cathode Band Color: Black

### Absolute Maximum Ratings

( $T_{amb}=25^{\circ}\text{C}$  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	$t_p = 10 \mu\text{s}$		$I_{FSM}$	2	A
Repetitive peak forward current			$I_{FRM}$	150	mA
Forward current			$I_F$	30	mA

### Thermal Characteristics

( $T_{amb}=25^{\circ}\text{C}$  unless otherwise specified)

Parameter	Test Condition	Symbol	Value	Unit
Junction ambient	on PC board 50 mm X 50mm X 1.6mm	$R_{\theta JA}$	320	K/W
Junction temperature		$T_J$	125	$^{\circ}\text{C}$
Storage temperature range		$T_{stg}$	-65 to +150	$^{\circ}\text{C}$

### Electrical Characteristics

( $T_{amb}=25^{\circ}\text{C}$  unless otherwise specified)

Parameter	Test Condition	Part	Symbol	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	$I_R = 10 \mu\text{A}$	LS101A	$V_{(BR)R}$	60			V
		LS101B		50			
		LS101C		40			
Leakage current	$V_R = 50\text{V}$	LS101A	$I_r$			200	nA
	$V_R = 40\text{V}$	LS101B				200	
	$V_R = 30\text{V}$	LS101C				200	
Forward voltage drop	$I_F = 1 \text{ mA}$	LS101A	$V_F$			0.41	V
		LS101B				0.4	
		LS101C				0.39	
	$I_F = 15 \text{ mA}$	LS101A				1	
		LS101B				0.95	
		LS101C				0.9	
Diode capacitance	$V_R = 0, f = 1\text{MHz}$	LS101A	$C_D$			2.0	pF
		LS101B				2.1	
		LS101C				2.2	

## ■ Typical characteristics

( $T_{amb}=25^{\circ}\text{C}$  unless otherwise specified)

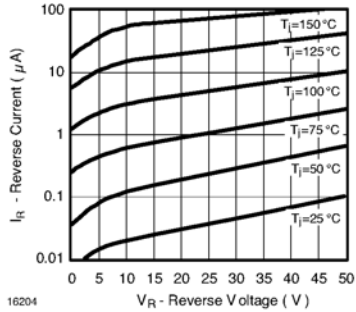


Fig. 1 Reverse Current vs. Reverse Voltage

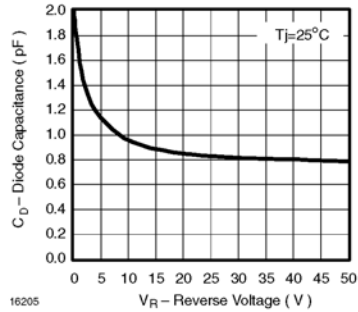


Fig. 2 Diode Capacitance vs. Reverse Voltage

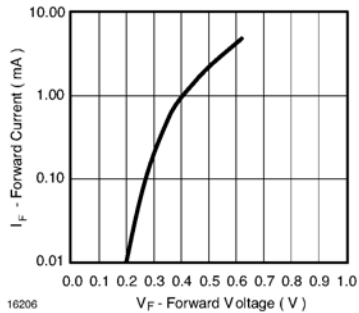


Fig. 3 Forward Current vs. Forward Voltage

## Package Dimensions in mm (inches)

