

SURFACE MOUNT SMALL SIGNAL SCHOTTKY DIODES

LL49

VOLTAGE RANGE: 80V CURRENT: 0.5A

Features

- Small foot print, surface mountable
- Very low forward voltage drop
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability

Mechanical Data

- Case: SOD-80/LL34, Glass
- Terminals: Solderable per MIL-STD-202,
- Method 208
- Polarity: Cathode Band
- Weight: 0.05 grams (approx.)

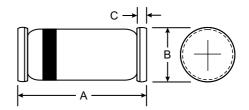


Symbol

С

 $T_i = 25^{\circ}C$





LL34/ SOD-80						
Dim	Min	Max				
Α	3.30	3.70				
В	1.30	1.60				
С	0.28	0.50				
All Dimensions in mm						

Min.

Тур.

120

35

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

Test Conditions

f = 1MHz

Parameter			Symbol	Value			Unit
Repetitive Peak Reverse Voltage			V _{RRM}	80			V
Forward Continuous Current* T _a = 70 °C			I _F	500			mA
$\begin{array}{lll} \mbox{Repetitive Peak Forward Current}^{*} & t_{p} = 1s \\ & \delta \leq 0.5 \end{array}$			I _{FRM}	3			А
Surge non Repetitive Forward Current* $t_p \leq 10 \text{ms}$			I _{FSM}	10			А
Storage and Junction Temperature Dange			T _{stg}	- 65 to 150			°C
Storage and Junction Temperature Range		Tj	- 65 to 125			°C	
Maximum Lead Temperature for Soldering during 10s at 4mm from Case			TL	230			°C
Symbol	Test Conditions			Min.	Тур.	Max.	Unit
I _R * *	T _j = 25°C	V _R = 80V				200	μA
V _F * *	$T_j = 25^{\circ}C$	I _F = 10mA				0.32	V
	$T_j = 25^{\circ}C$	I _F = 100mA				0.42	
	$T_j = 25^{\circ}C$	I _F = 1A				1	

Max.

Unit

pF

 $V_R = 0V$

 $V_R = 5V$



Figure 1. Forward current versus forward voltage at low level (typical values).

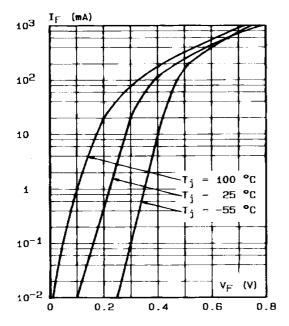


Figure 2. Forward current versus forward voltage at high level (typical values).

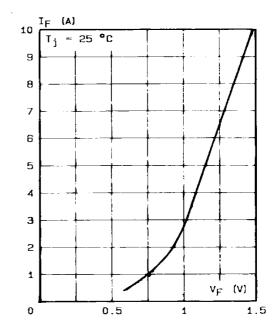


Figure 3. Reverse current versus junction temperature.

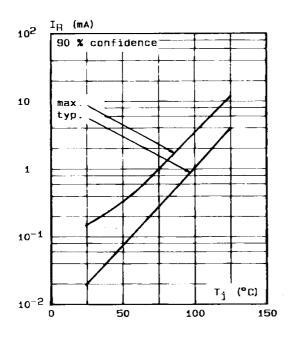


Figure 4. Reverse current versus $V_{\mbox{\scriptsize RRM}}$ in per cent.

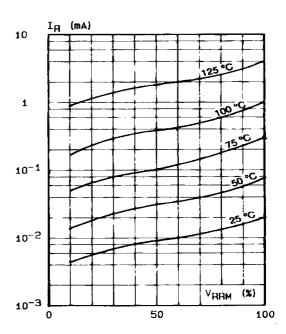




Figure 5. Capacitance C versus reverse applied voltage V_R (typical values).

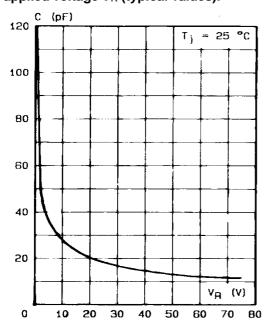


Figure 6. Surge non repetitive forward current for a rectangular pulse with t \leq 10 ms.

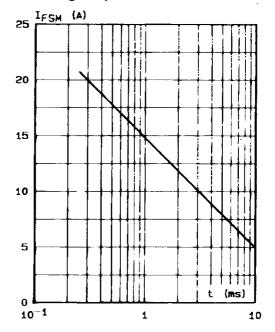


Figure 7. Surge non repetitive forward current versus number of cycles.

