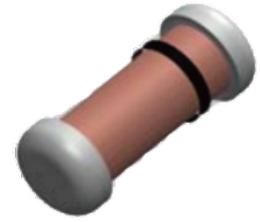


FEATURES

- | Fast Switching Device (TRR <4.0nS)
- | Power Dissipation of 500mW
- | High Stability and High Reliability
- | Low reverse leakage
- | Meet AEC-Q101 Requirements



LL34

MECHANICAL DATA

- | LL-34 Glass Case
- | Color band denotes cathode end
- | Mounting Position: Any

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Power Dissipation	P_D	500	mW
Average Rectified Current	I_o	150	mA
Non-Repetitive Peak Forward Current	I_{FM}	450	mA
Peak Forward Current @ $t_p=1s$; $T_A=25^{\circ}\text{C}$	I_{FSM}	2.0	A
Working Inverse Voltage	V_{IN}	75	V
Operating Junction Temperature	T_J	175	$^{\circ}\text{C}$
Storage Temperature Range	T_S	-65 to +200	$^{\circ}\text{C}$

Valid provided that electrodes are kept at ambient temperature.

ELECTRICAL CHARACTERISTICS($T_A=25^{\circ}\text{C}$)

Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Voltage	$I_R=100\mu\text{A}$	B_V	100			V
	$I_R=5\mu\text{A}$		75			
Reverse Leakage Current	$V_R=20\text{V}$	I_R			25	nA
	$V_R=75\text{V}$				5	μA
Forward Voltage	$I_F=10\text{mA}$	V_F			1	V
Reverse Recovery Time	$I_F=10\text{mA}, I_R=1.0\text{mA}$ $R_L=100\Omega, I_{RR}=1\text{mA}$	T_{RR}			4	nS
Capacitance	$V_R=0\text{V}, f=1\text{MHz}$	C_T			4	pF

CHARACTERISTIC CURVES

Fig 1. Power Dissipation vs Ambient Temperature

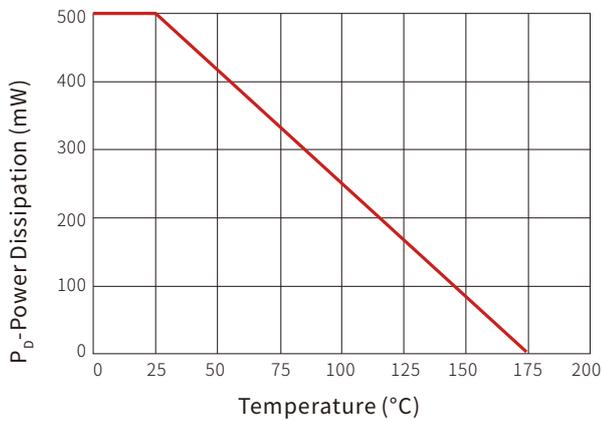


Fig 2. Total Capacitance

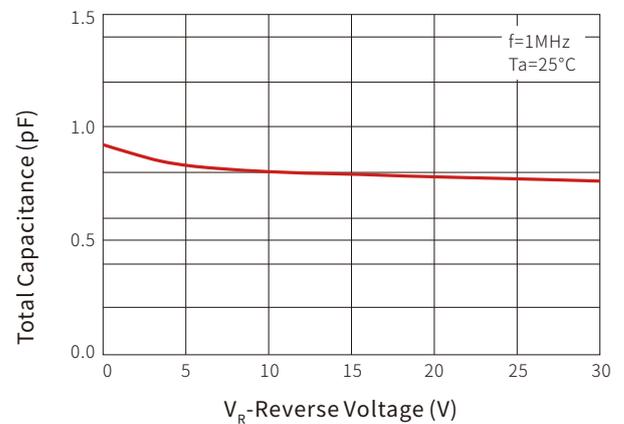


Fig 3. Reverse Voltage vs Reverse Current
BV-1.0 μ A to 100 μ A

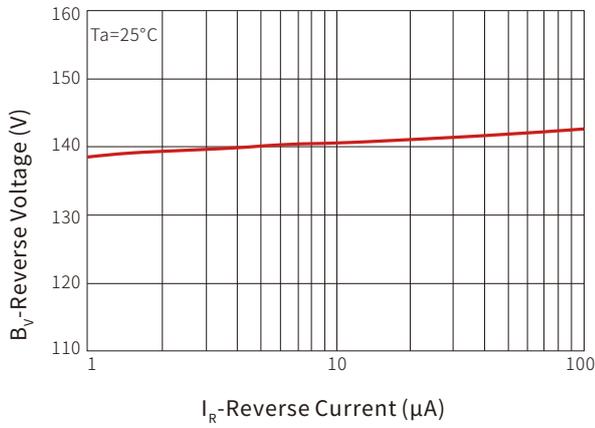


Fig 4. Reverse Current vs Reverse Voltage
IR-10V to 100V

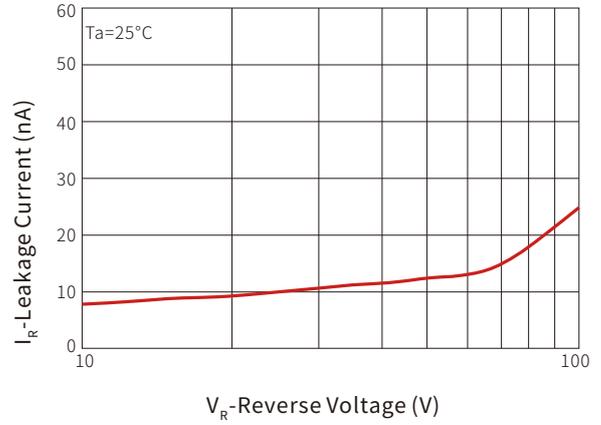


Fig 5. Forward Voltage vs Forward Current
VF-0.001mA to 800mA

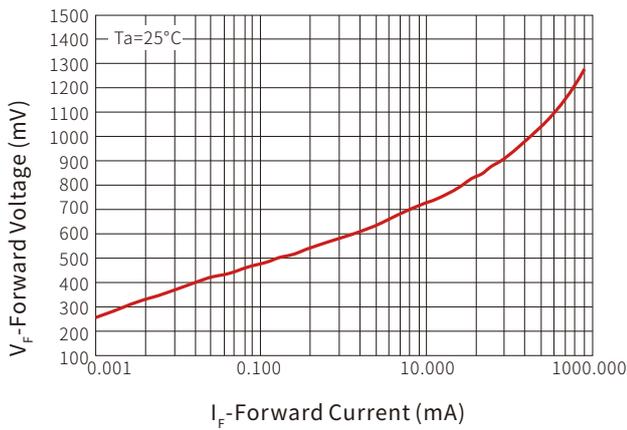
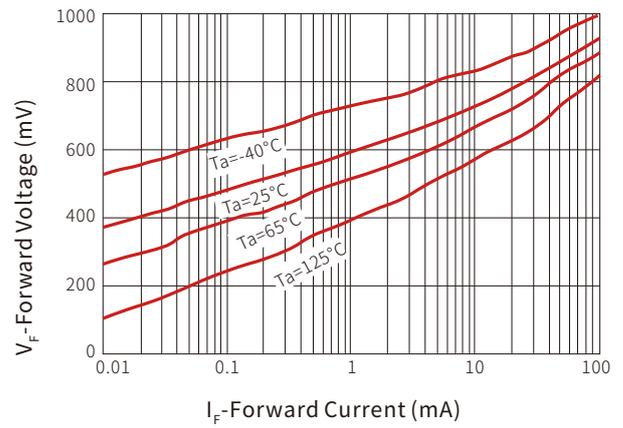
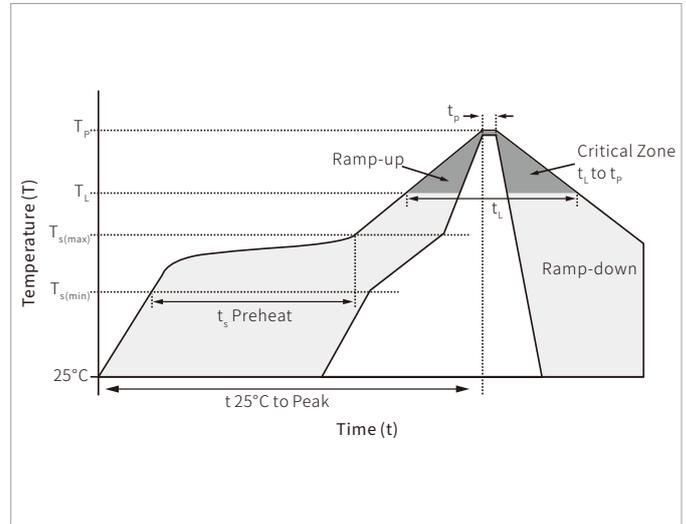


Fig 4. Forward Voltage vs Ambient Temperature
VF-0.01mA to 100mA(-40°C to +125°C)

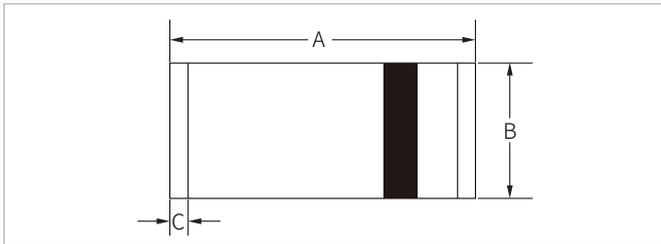


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C



LL34 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	3.30	3.60	0.130	0.142
B	1.40	1.55	0.055	0.061
C	0.30	0.55	0.012	0.022

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
LL4148Q	LL34	2500PCS	7"

Headquarters

No.3387 Shendu Road
Pujiang I&E Park
Minhang Shanghai China
201000

Hotline

400-021-5756

Web

<https://www.semiware.com>

Sales Center

Tel: 86-21-3463-7458
Email: sales18@semiware.com

Customer Service

Tel: 86-21-5484-1001
Email: sales17@semiware.com

Technical Support

Tel: 86-21-3463-7654
Email: fae01@semiware.com

Complaint & Suggestions

Tel: 86-21-3463-7172
Ext: 8868
Email: cs03@semiware.com

By QR Code

Website



Wechat

To find your local partner within Semiware' s global website: www.semiware.com

© 2022 Semiware Semiconductor Inc.

The content of this document has been carefully checked and understood. However, neither Semiware nor its subsidiaries assume any liability whatsoever for any errors or inaccuracies of this document and the consequences thereof. Published specifications are subject to change without notice. Product suitability for any area of application must ultimately be determined by the customer. In all cases, products must never be operated outside their published specifications. Semiware does not guarantee the availability of all published products. This disclaimer shall be governed by substantive Chinese law and resulting disputes shall be settled by the courts at the place of business of Semiware. Latest publications and a complete disclaimer can be downloaded from the Semiware website. All trademarks recognized.