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°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 @tp=1s; TA=25°C	I_{FSM}	2.0	A
Working Inverse Voltage	V_{IN}	75	V
Operating Junction Temperature	T_J	175	°C
Storage Temperature Range	T_S	-65 to +200	°C

Valid provided that electrodes are kept at ambient temperature.

ELECTRICAL CHARACTERISTICS(T_A=25°C)

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

CHARACTERISTIC CURVES

Fig 1. Power Dissipation vs Ambient Temperature

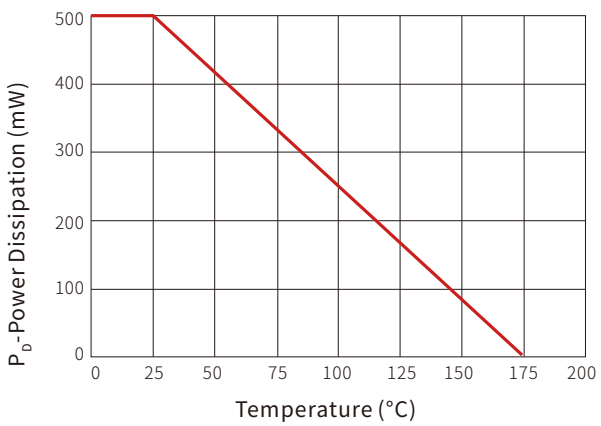


Fig 2. Total Capacitance

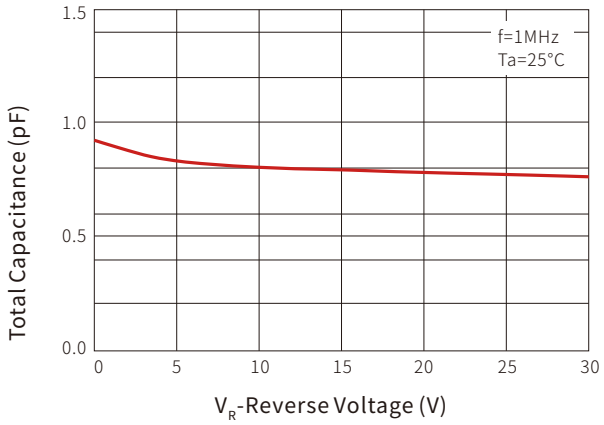


Fig 3. Reverse Voltage vs Reverse Current
BV-1.0μA to 100μA

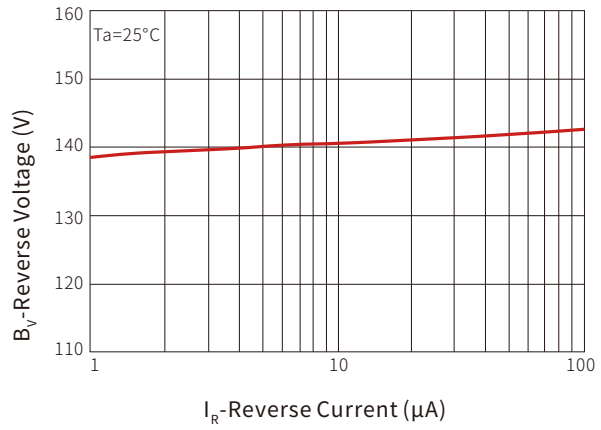


Fig 4. Reverse Current vs Reverse Voltage
IR-10V to 100V

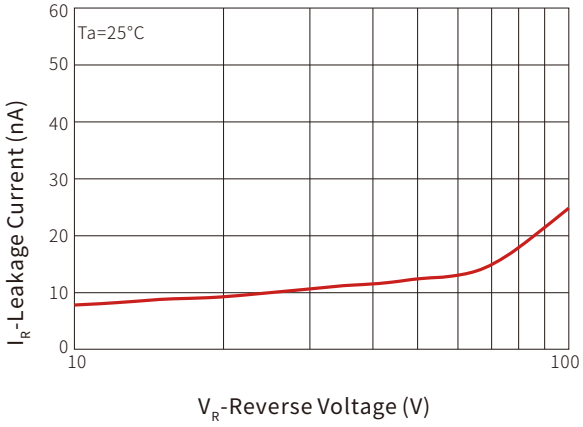


Fig 5. Forward Voltage vs Forward Current
V_F-0.001mA to 800mA

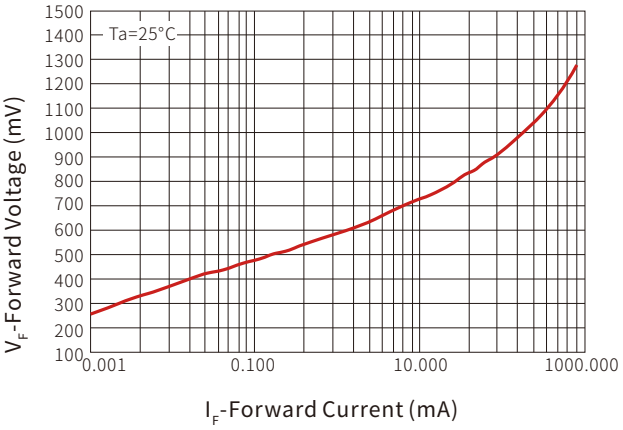
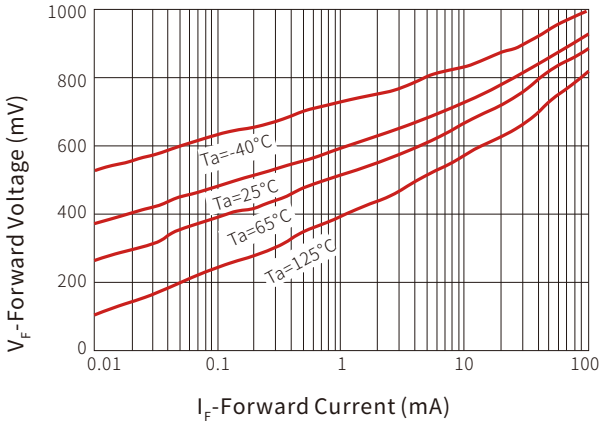
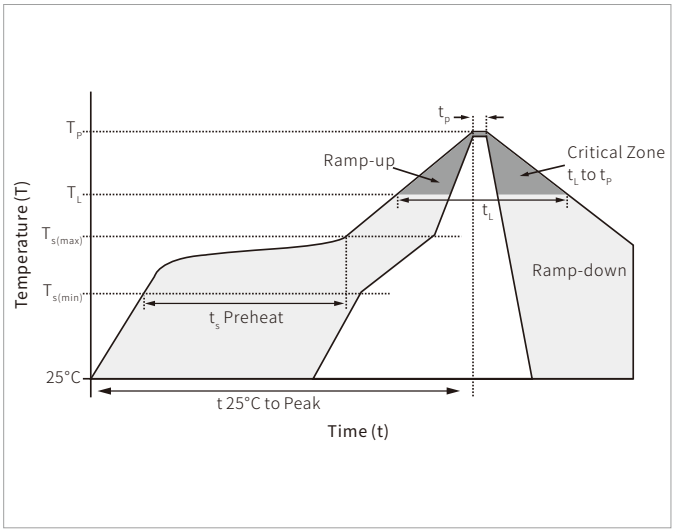


Fig 4. Forward Voltage vs Ambient Temperature
V_F-0.01mA to 100mA(-40°C to +125°C)

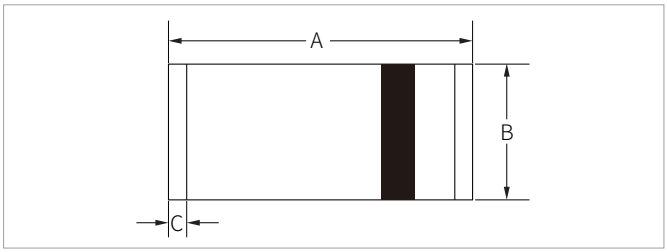


SOLDERING PARAMETERS

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”

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No.3387 Shendu Road
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