

FEATURES

Fast switching diode in MiniMELF case especially suited for automatic surface mounting High Conductance



LL34

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
Peak Reverse Voltage	V_{RRM}	100	V
Reverse Voltage	V_{RMS}	75	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	at $t=1s$	0.5
		at $t=1ms$	1.0
		at $t=1\mu s$	4.0
Power Dissipation	P_{tot}	500 ¹⁾	mW
Junction Temperature	T_J	175	°C
Storage Temperature Range	T_{STG}	-65 to 175	°C

1) Valid provided that electrodes are kept at ambient temperature

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

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage tested with 100 μA Pulses	$V_{(BR)R}$	100		V
Forward Voltage at $I_F = 10\text{ mA}$	V_F		1	V
Leakage Current at	I_R		25	nA
			5	μA
			50	μA
Capacitance at $V_R = 0, f = 1\text{ MHz}$	C_{tot}		4	pF
Voltage Rise when Switching ON tested with 50 mA Forward Pulses $t_p = 0.1\text{ s}$, Rise Time < 30 ns, $f_p = 5\text{ to }100\text{ KHz}$	V_{fr}		2.5	V
Reverse Recovery Time at $I_F=10\text{mA}$ to $I_R=1\text{mA}$, $I_{rr}=0.1 \times I_R, V_R=6\text{V}, R_L=100\Omega$	t_{rr}		4	ns

CHARACTERISTIC CURVES

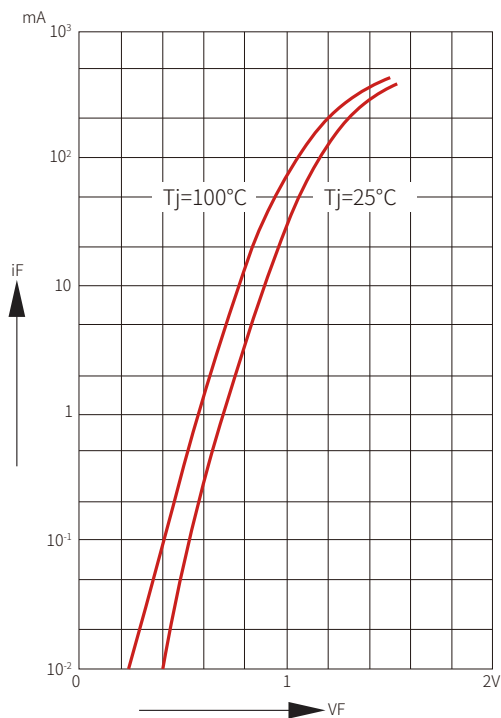
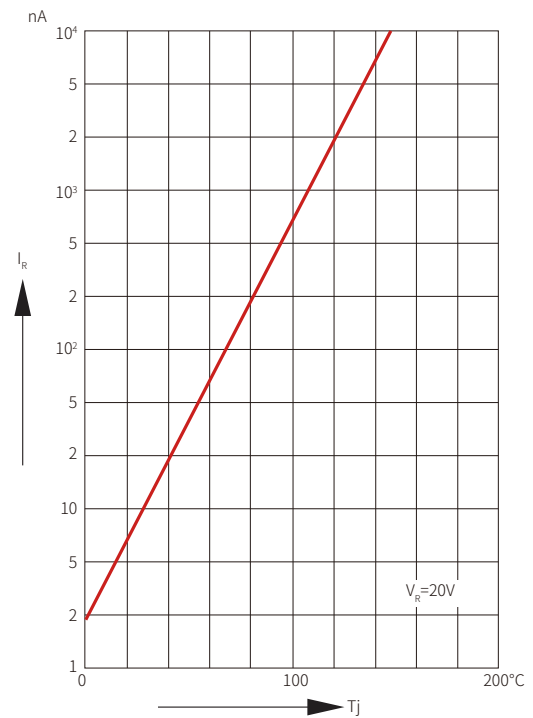
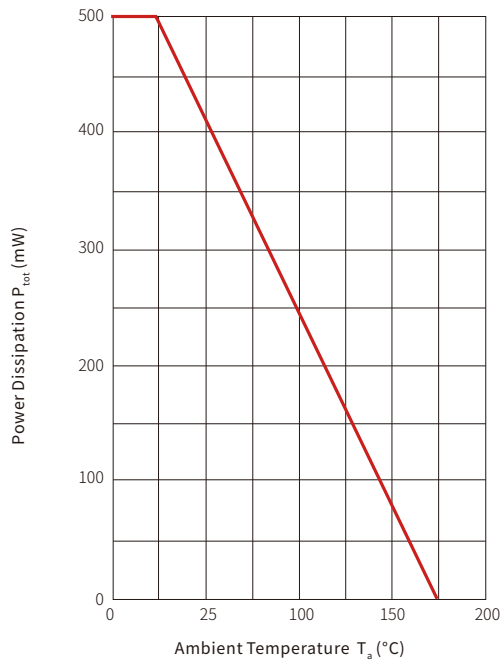
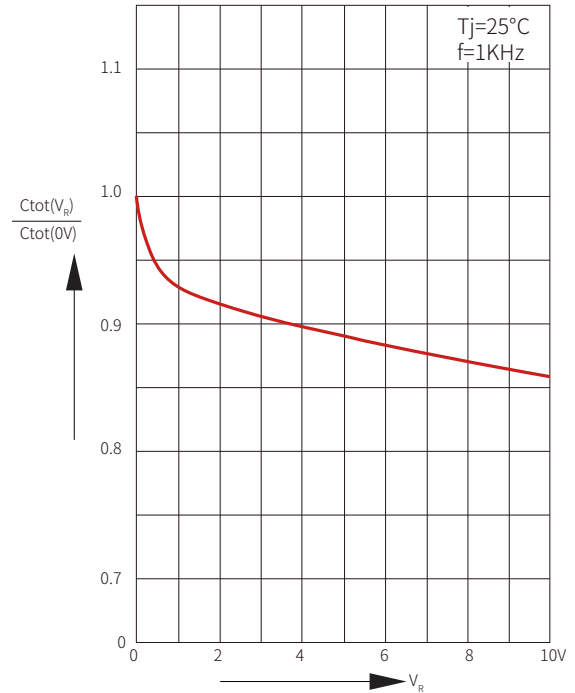
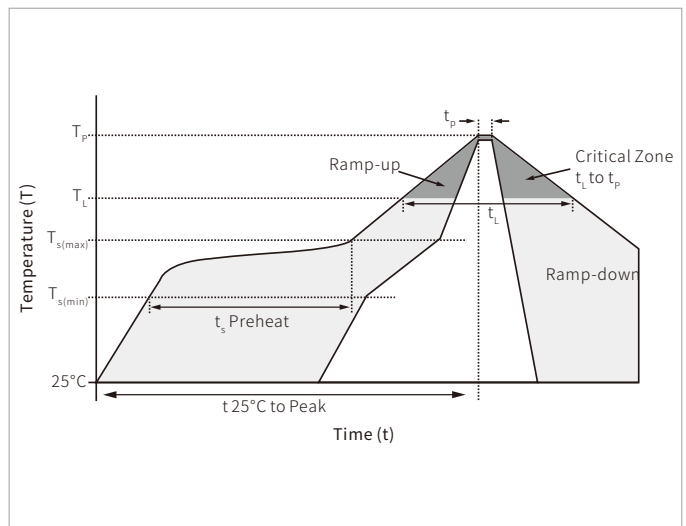
Fig.1 Forward characteristics

Fig.2 Leakage current versus junction temperature


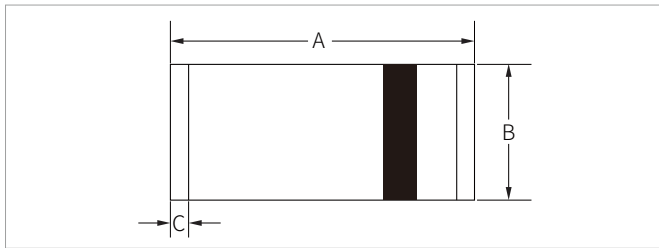
Fig.3 Power Derating Curve

Fig.4 Relative capacitance versus reverse voltage


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_r)	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	1.50	0.055	0.059
C	0.25	0.33	0.010	0.013

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
LL4148	LL34	2500PCS	7"

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By QR Code

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