FEATURES

Fast switching diode in MiniMELF case especially suited

LL34

APPROVALS

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

MAXIMUM RATINGS (T_A=25°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	at t=1s	I_{FSM}	0.5	A
	at t=1ms		1.0	A
	at t=1μs		4.0	A
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°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 mA		V_F		1	V
Leakage Current at	V_R = 20 V	I_R		25	nA
	V_R = 75 V			5	μA
	V_R = 20 V T_j = 150 °C			50	μA
Capacitance at V_R = 0, f = 1 MHz		C_{tot}		4	pF
Voltage Rise when Switching ON tested with 50 mA Forward Pulses tp = 0.1 s, Rise Time < 30 ns, fp = 5 to 100 KHz		V_{fr}		2.5	V
Reverse Recovery Time at I_F=10mA to I_R=1mA, Irr=0.1×I_R,V_R=6V, R_L=100Ω		t_{rr}		4	ns

CHARACTERISTIC CURVES

Fig.1 Forward characteristics

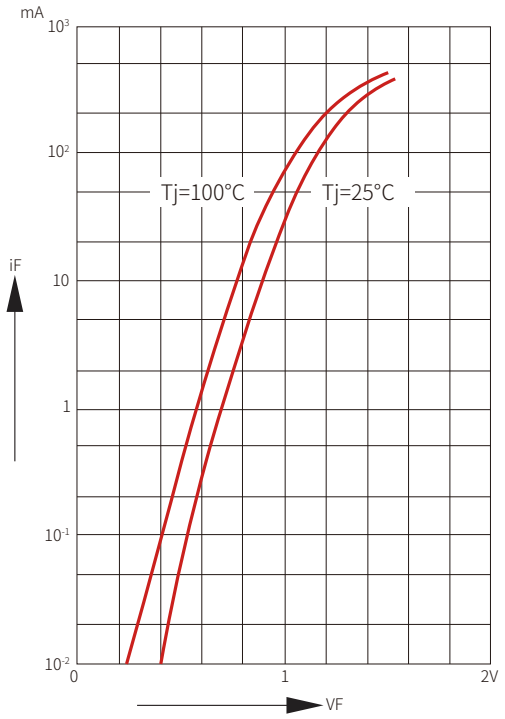


Fig.2 Leakage current versus junction temperature

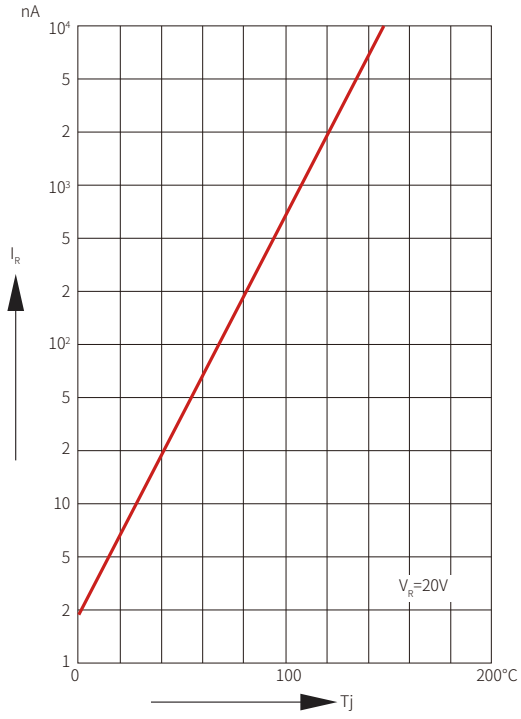


Fig.3 Power Derating Curve

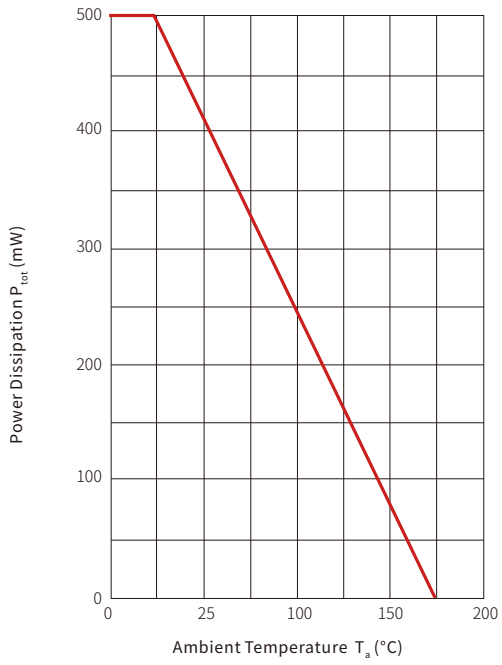
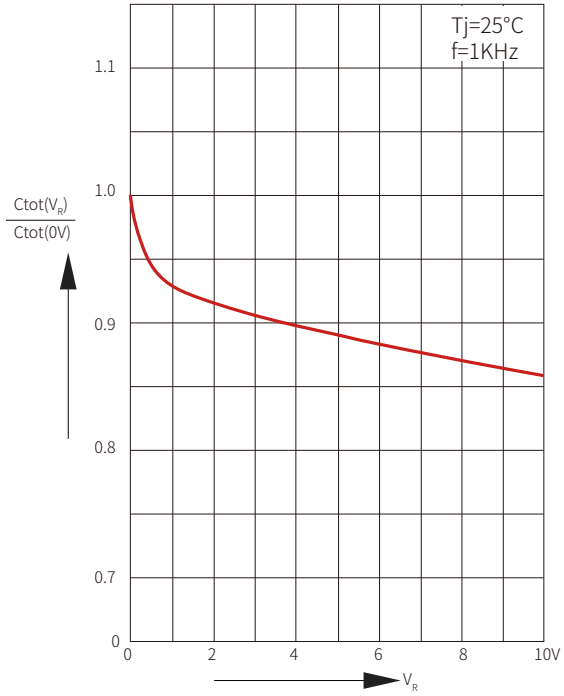
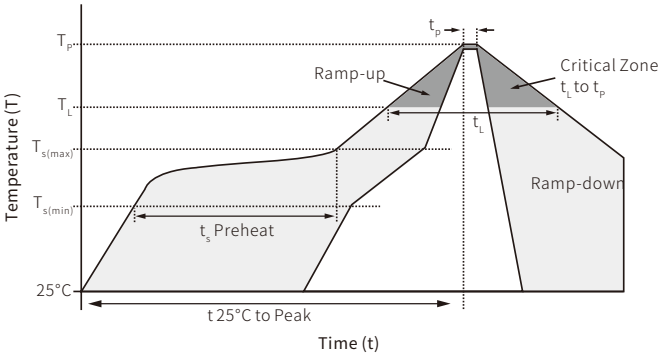


Fig.4 Relative capacitance versus reverse voltage

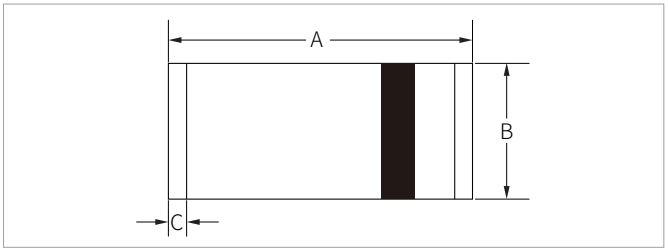


SOLDERING PARAMETERS

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_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	1.50	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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