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Fast Switching Diode in Mini MELF/LL-34

Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

Mechanical Data

- Case:Mini MELF/LL-34 (plastic package). Lead free; RoHS compliant
- Molding Compound Flammability Rating: UL 94 V-0
- **Terminals:** High temperature soldering guaranteed: 260 °C/10 sec. at terminals





Applications

- High Speed Switching and Reverse Polarity Protection
- High Speed Rectifying Applications
- Consumer, Automotive and Telecommunication Industry

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Reverse Voltage	V _{RRM} V _{RWM} V _R	75	V
Forward Continuous Current	I _{FM}	300	mA
Average Rectified Output Current	I _o	150	mA
Non-Repetitive Peak Forward Surge Current @t=1.0 μs @t=1.0 s	I _{FSM}	2.0 1.0	A
Power Dissipation	P _D	400	mW
Thermal Resistance Junction to Ambient Air	R _{0JA}	625	°C/W
Operating and Storage Temperature Rage	T _J , T _{STG}	-55 to +150	°C

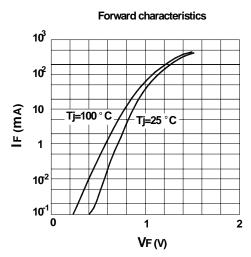
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Electrical Characteristics

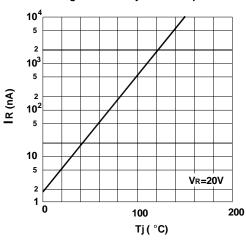
(T_A = 25 °C unless otherwise specified)

Parameter	Symbol	Min	Max	Unit	Test Conditions
Reverse Breakdown Voltage	V _{(BR)R}	75	-	V	Ι _R =1.0μΑ
			0.715		I _F =1mA
Forward Voltage	VF	-	0.855	V	I _F =10mA
			1.0		I _F =50mA
			1.25		I _F =150mA
Reverse Current	I _R	-	5.0	μA	V _R =75V
			25	nA	V _R =20V
Junction Capacitance	CJ	-	4.0	pF	V _R =0,f=1.0MHz
Reverse Recovery Time	t _{rr}	-	4.0	ns	I _F =I _R =10mA, I _{rr} =0.1×I _R ,R _L =100Ω

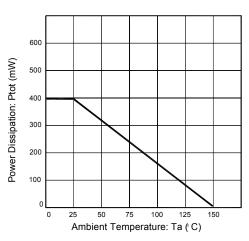
Typical Characteristics ($T_{amb} = 25 \text{ °C}$ unless otherwise specified)



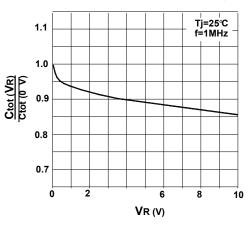
Leakage current vs. junction temperature



Power Dissipation vs Ambient Temperature



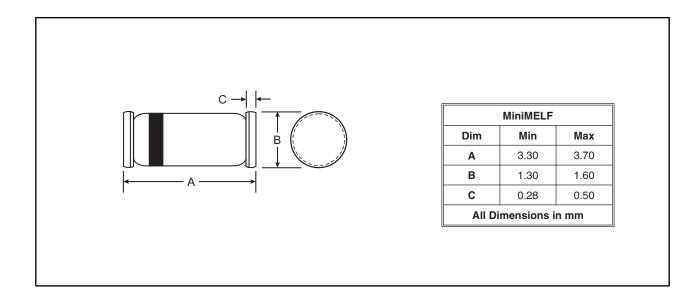
Reverse capacitance vs. reverse voltage





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Package Dimensions



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
LL4148	LL-34	Tape and reel	2500pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release

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