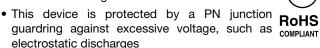
Vishay Semiconductors



FEATURES

- For general purpose applications
- This diode features low turn-on voltage and high breakdown voltage



- This diode is also available in the DO-35 (DO-204AH) case with type designation BAT41
- AEC-Q101 qualified
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>

PARTS TABLE						
PART	ORDERING CODE	INTERNAL CONSTRUCTION	REMARKS			
LL41	LL41-GS18 or LL41-GS08	Single diode	Tape and reel			

ABSOLUTE MAXIMUM RATINGS (T _{amb} = 25 °C, unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT	
Repetitive peak reverse voltage		V _{RRM}	100	V	
Forward continuous current (1)		I _F	100	mA	
Repetitive peak forward current (1)	$t_p < 1 s, \delta < 0.5$	I _{FRM}	350	mA	
Surge forward current (1)	t _p = 10 ms	I _{FSM}	750	mA	
Power dissipation ⁽¹⁾	T _{amb} = 65 °C	P _{tot}	200	mW	

Note

⁽¹⁾ Valid provided that electrodes are kept at ambient temperature

THERMAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT	
Thermal resistance junction to ambient air		R _{thJA}	300 (1)	K/W	
Junction temperature		Tj	125	°C	
Ambient operating temperature range		T _{amb}	-65 to +125	°C	
Storage temperature range		T _{stg}	-65 to +150	°C	

Note

⁽¹⁾ Valid provided that electrodes are kept at ambient temperature

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DESIGN SUPPORT TOOLS click logo to get started

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MECHANICAL DATA Case: MiniMELF (SOD-80) Weight: approx. 31 mg Cathode band color: black Packaging codes/options:

GS18/10K per 13" reel (8 mm tape), 10K/box GS08/2.5K per 7" reel (8 mm tape), 12.5K/box

Models Available LL41



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LL41

ELECTRICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Reserve breakdown voltage ⁽¹⁾	I _R = 100 μA	V _(BR)	100	110		V
Leakage current ⁽¹⁾	V _R = 50 V, T _j = 25 °C	I _R			100	nA
Leakage current (*)	$V_{R} = 50 \text{ V}, \text{ T}_{j} = 100 ^{\circ}\text{C}$	I _R			20	μA
Forward voltage ⁽¹⁾	I _F = 1 mA	VF		400	450	mV
Forward Voltage (*)	I _F = 200 mA	V _F			1000	mV
Diode capacitance	V _R = 1 V, f = 1 MHz	CD		2		pF

Note

⁽¹⁾ Pulse test, t_p = 300 µs

TYPICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)

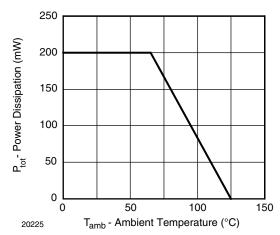
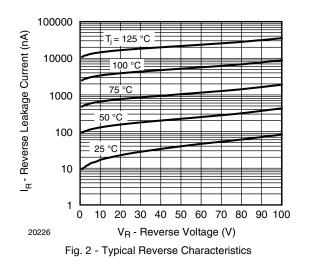
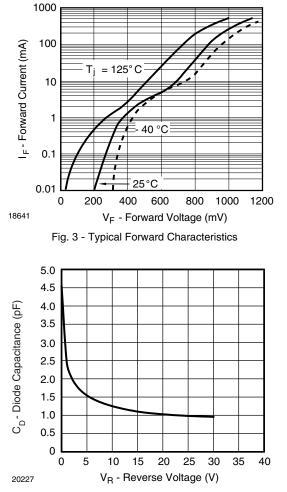


Fig. 1 - Admissible Power Dissipation vs. Ambient Temperature







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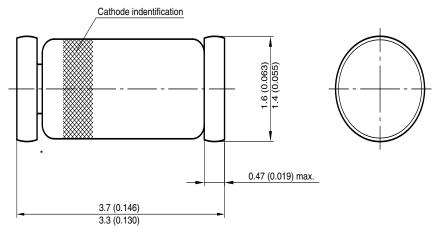
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For technical questions within your region: <u>DiodesAmericas@vishay.com</u>, <u>DiodesAsia@vishay.com</u>, <u>DiodesEurope@vishay.com</u> THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT <u>www.vishay.com/doc?91000</u>

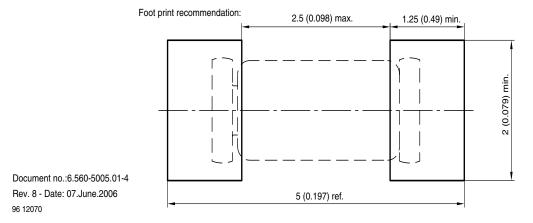


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PACKAGE DIMENSIONS in millimeters (inches): MiniMELF (SOD-80)



^{*} The gap between plug and glass can be either on cathode or anode side





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