



### Small Signal Fast Switching Diode



#### FEATURES

- Silicon epitaxial planar diode
- For general purpose and switching
- This diode is also available in other case styles including the DO-35 case with the type designation 1N4150, and the MiniMELF case with the type designation LL4150.
- AEC-Q101 qualified
- Material categorization: For definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



RoHS COMPLIANT

#### MECHANICAL DATA

Case: SOD-123

Weight: approx. 10.3 mg

Packaging codes/options:

GS18/10K per 13" reel (8 mm tape), 10K/box

GS08/3K per 7" reel (8 mm tape), 15K/box

PARTS TABLE				
PART	ORDERING CODE	TYPE MARKING	INTERNAL CONSTRUCTION	REMARKS
1N4150W-V	1N4150W-V-GS18 or 1N4150W-V-GS08	A4	Single diode	Tape and reel

ABSOLUTE MAXIMUM RATINGS (T <sub>amb</sub> = 25 °C, unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Repetitive peak reverse voltage		V <sub>RRM</sub>	50	V
Maximum average forward rectified current		I <sub>F(AV)</sub>	200	mA
Maximum power dissipation <sup>(1)</sup>		P <sub>tot</sub>	410	mW

THERMAL CHARACTERISTICS (T <sub>amb</sub> = 25 °C, unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Thermal resistance junction to ambient air <sup>(1)</sup>		R <sub>thJA</sub>	375	K/W
Maximum junction temperature		T <sub>j</sub>	150	°C
Storage temperature range		T <sub>stg</sub>	- 65 to + 150	°C

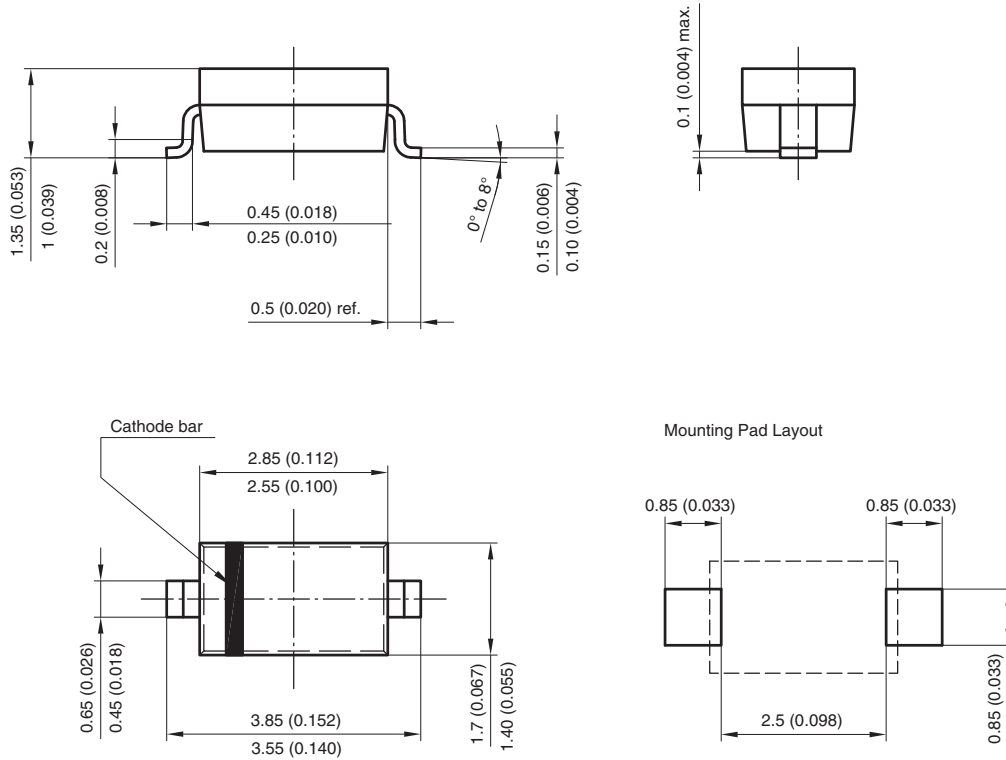
**Note**

<sup>(1)</sup> Valid provided that electrodes are kept at ambient temperature.



ELECTRICAL CHARACTERISTICS (T <sub>amb</sub> = 25 °C, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage	I <sub>F</sub> = 1 mA	V <sub>F</sub>	540		620	mV
	I <sub>F</sub> = 10 mA	V <sub>F</sub>	660		740	mV
	I <sub>F</sub> = 50 mA	V <sub>F</sub>	760		860	mV
	I <sub>F</sub> = 100 mA	V <sub>F</sub>	820		920	mV
	I <sub>F</sub> = 200 mA	V <sub>F</sub>	870		1000	mV
Reverse current	V <sub>R</sub> = 50 V	I <sub>R</sub>			100	nA
	V <sub>R</sub> = 50 V, T <sub>j</sub> = 150 °C	I <sub>R</sub>			100	μA
Diode capacitance	V <sub>R</sub> = 0, f = 1 MHz, V <sub>HF</sub> = 50 mV	C <sub>D</sub>			2.5	pF
Reverse recovery time	I <sub>F</sub> = I <sub>R</sub> = (10 to 100) mA I <sub>R</sub> = 0.1 x I <sub>F</sub> , R <sub>L</sub> = 100 Ω	t <sub>rr</sub>			4	ns

**PACKAGE DIMENSIONS** in millimeters (inches): **SOD-123**



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