

## **Vishay Semiconductors**

17431

# **Small Signal 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
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC

### **Mechanical Data**

Case: SOD-123

**Weight:** approx. 9.3 mg **Packaging codes/options:** 

GS18 / 10 k per 13" reel (8 mm tape), 10 k/box GS08 / 3 k per 7" reel (8 mm tape), 15 k/box

### **Parts Table**

Part	Ordering code	Marking	Remarks	
1N4150W-V	1N4150W-V-GS18 or 1N4150W-V-GS08	A4	Tape and reel	

### **Absolute Maximum Ratings**

T<sub>amb</sub> = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Peak reverse voltage		$V_{RM}$	50	V
Maximum average forward rectified current		I <sub>F(AV)</sub>	200	mA
Maximum power dissipation		P <sub>tot</sub>	410 <sup>1)</sup>	mW

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

### **Thermal Characteristics**

T<sub>amb</sub> = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Maximum junction temperature		T <sub>j</sub>	150	°C
Storage temperature range		T <sub>S</sub>	- 65 to + 150	°C

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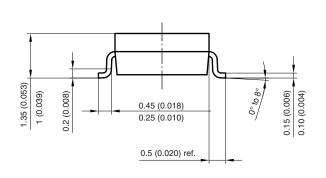


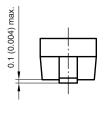
### **Electrical Characteristics**

T<sub>amb</sub> = 25 °C, unless otherwise specified

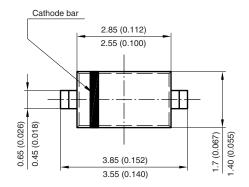
Parameter	Test condition	Symbol	Min.	Тур.	Max.	Unit
Forward voltage drop	I <sub>F</sub> = 200 mA	V <sub>F</sub>			1	V
Reverse current	V <sub>R</sub> = 50 V	I <sub>R</sub>			100	nA
Reverse recovery time	$I_F = I_R = (10 \text{ to } 200) \text{ mA}$ to $I_{rr} = 0.1I_F$	t <sub>rr</sub>			4	ns

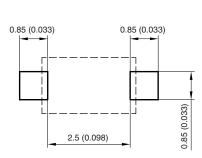
### Package Dimensions in millimeters (inches): SOD-123





Mounting Pad Layout





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