



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Small Signal Fast Switching Diode



FEATURES

- Silicon epitaxial planar diode
- For general purpose and switching
- AEC-Q101 qualified available
- Base P/N-E3 - RoHS-compliant, commercial grade
- Base P/N-HE3 - RoHS-compliant, AEC-Q101 qualified
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS COMPLIANT

DESIGN SUPPORT TOOLS

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MECHANICAL DATA

Case: SOD-123

Weight: approx. 10.3 mg

Packaging codes / options:

18/10K per 13" reel (8 mm tape), 10K/box

08/3K per 7" reel (8 mm tape), 15K/box

PARTS TABLE				
PART	ORDERING CODE	TYPE MARKING	CIRCUIT CONFIGURATION	REMARKS
1N4150W	1N4150W-E3-08 or 1N4150W-E3-18	A4	Single	Tape and reel
	1N4150W-HE3-08 or 1N4150W-HE3-18			

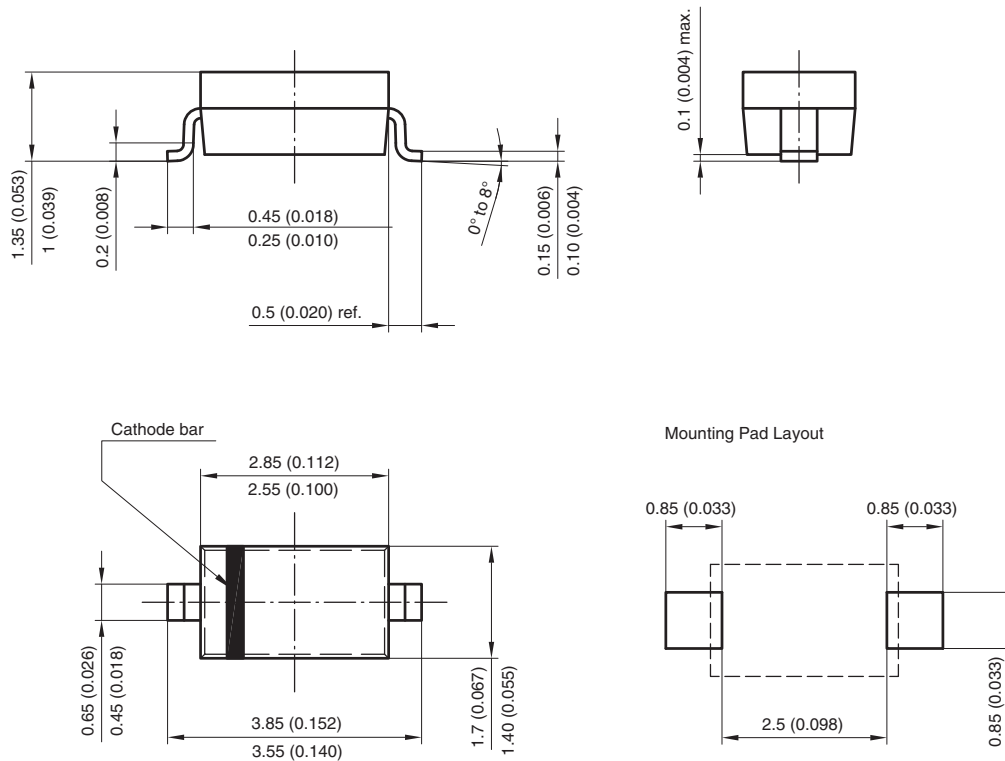
ABSOLUTE MAXIMUM RATINGS (T _{amb} = 25 °C, unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Repetitive peak reverse voltage		V _{RRM}	50	V
Maximum average forward rectified current		I _{F(AV)}	200	mA
Maximum power dissipation ⁽¹⁾		P _{tot}	410	mW

THERMAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Thermal resistance junction to ambient air ⁽¹⁾		R _{thJA}	375	K/W
Maximum junction temperature		T _j	150	°C
Storage temperature range		T _{stg}	-65 to +150	°C
Operating temperature range		T _{op}	-55 to +150	°C

Note

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

ELECTRICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage	$I_F = 1\text{ mA}$	V_F	0.540		0.620	V
	$I_F = 10\text{ mA}$	V_F	0.660		0.740	V
	$I_F = 50\text{ mA}$	V_F	0.760		0.860	V
	$I_F = 100\text{ mA}$	V_F	0.820		0.920	V
	$I_F = 200\text{ mA}$	V_F	0.870		1	V
Reverse current	$V_R = 50\text{ V}$	I_R			100	nA
	$V_R = 50\text{ V}, T_j = 150\text{ }^{\circ}\text{C}$	I_R			100	μA
Diode capacitance	$V_R = 0, f = 1\text{ MHz}, V_{HF} = 50\text{ mV}$	C_D			2.5	pF
Reverse recovery time	$I_F = I_R = (10\text{ to }100)\text{ mA}$ $i_R = 0.1 \times I_R, R_L = 100\ \Omega$	t_{rr}			4	ns

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


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