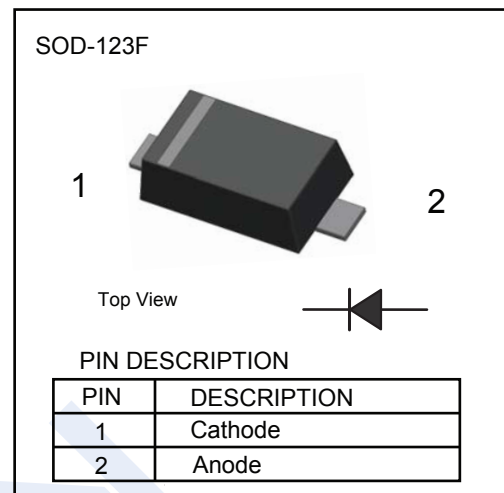


## Switching Diodes

## 1N4148W

## ■ Features

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

■ Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ , unless otherwise specified)

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	$V_{RRM}$	100	V
Reverse voltage	$V_R$	75	
Peak forward surge current ( $t_p = 1\ \mu\text{s}$ )	$I_{FSM}$	2	A
Repetitive peak forward current	$I_{FRM}$	500	mA
Forward continuous current	$I_F$	300	
Average forward current	$I_{F(AV)}$	150	
Thermal resistance junction to ambient air <sup>*1</sup>	$R^{\theta}JA$	300	$^\circ\text{C}/\text{W}$
Power dissipation <sup>*1</sup>	$P_{tot}$	500	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to 150	

\* 1 Valid provided that electrodes are kept at ambient temperature

■ Electrical Characteristics ( $T_a = 25\text{ }^\circ\text{C}$ , unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_R$	$I_R=100\ \mu\text{A}$	100			V
Forward voltage	$V_F$	$I_F=1\text{mA}$			0.715	
		$I_F=10\text{mA}$			0.855	
		$I_F=50\text{mA}$			1	
		$I_F=150\text{mA}$			1.25	
Reverse voltage leakage current	$I_R$	$V_R=20\text{V}$			25	nA
		$V_R=75\text{V}$			1	$\mu\text{A}$
Junction capacitance	$C_j$	$V_R=4\text{V}$ , $f=1\text{MHz}$			4	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10\text{mA}$ , $I_{rr}=0.1 \times I_R$ , $R_L=100\ \Omega$			4	ns

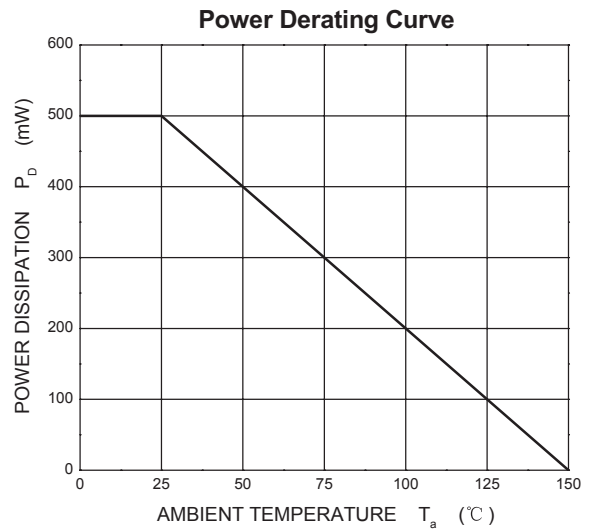
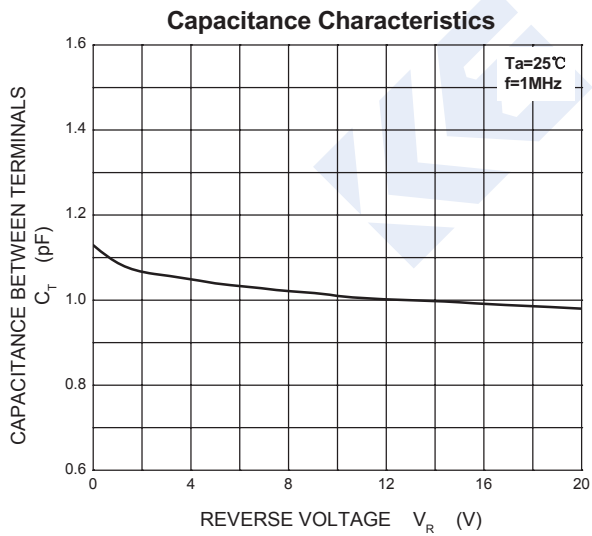
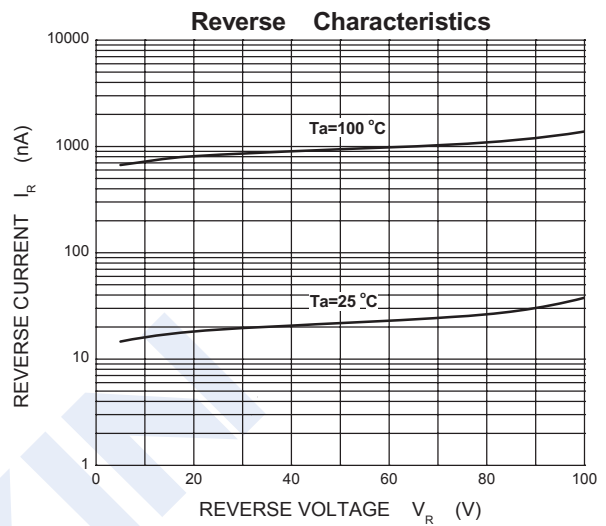
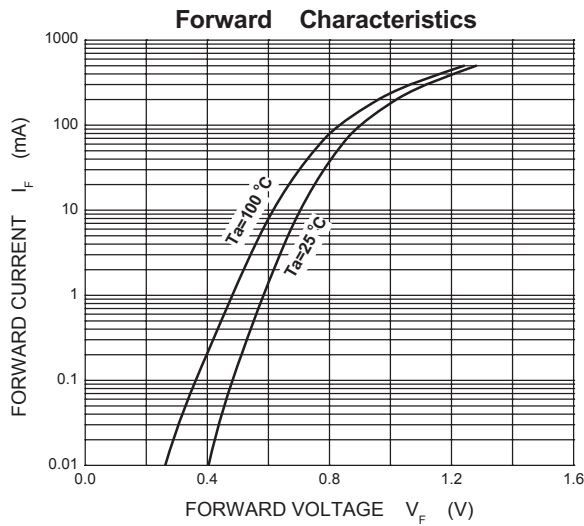
## ■ Marking

Marking	T4
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## Switching Diodes

### 1N4148W

■ Typical Characteristics



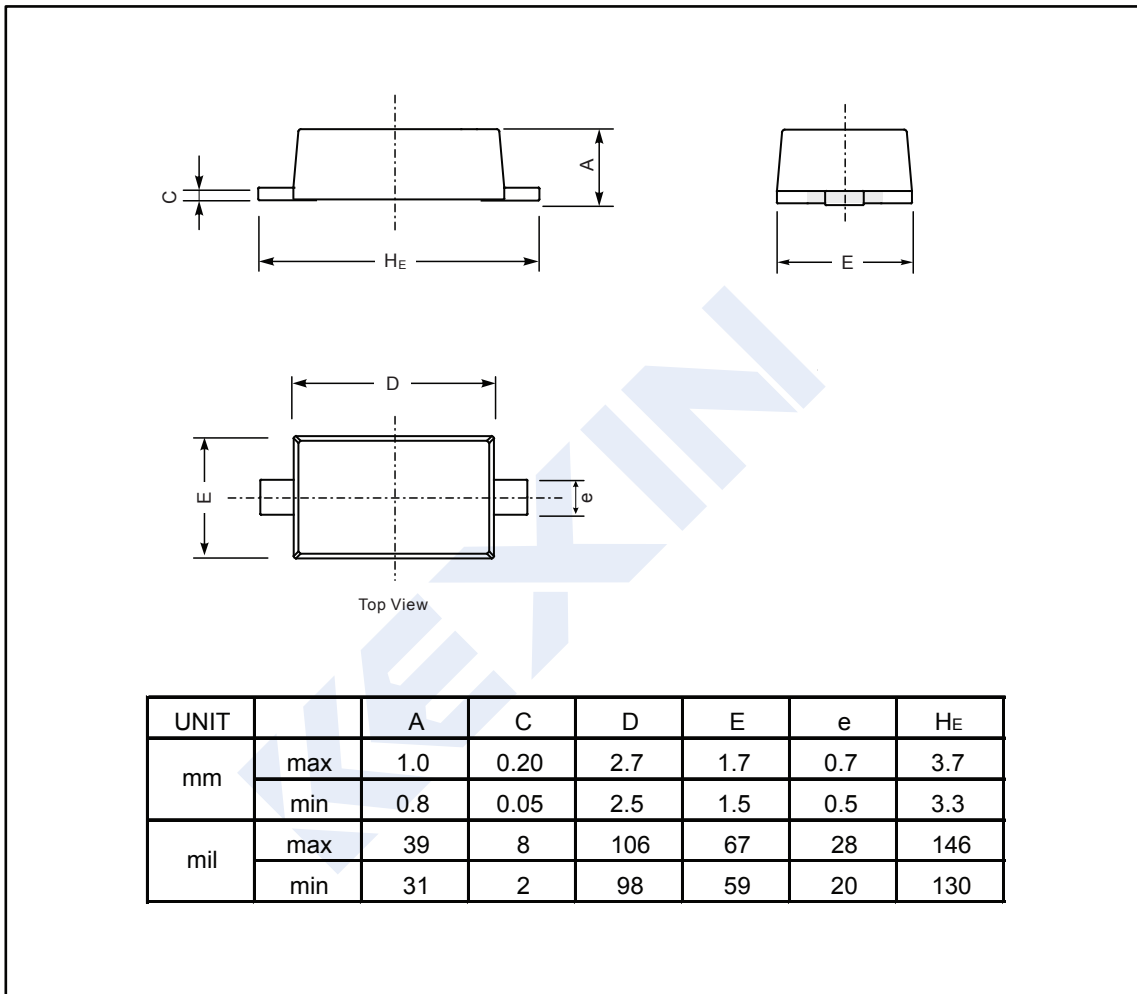
### Switching Diodes

### 1N4148W

■ Package Outline Dimensions

Plastic surface mounted package; 2 leads

SOD-123F



■ The Recommended Mounting Pad Size

