

## **High Speed Switching Diode**

#### Features

- V<sub>R</sub> 75V
- I<sub>FAV</sub> 150mA

#### **Typical Applications**

• Extreme fast switches

#### **Mechanical Data**

- Package: SOD323
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Cathode line denotes the cathode end
- Marking: T4

Maximum Ratings (Ta=25°C Unless otherwise specified)				
PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	Vrrm	V		100
Peak forward surge current	I <sub>FSM</sub>	A	t <sub>p</sub> =1µs	2
Average forward current	I <sub>FAV</sub>	mA		150
Power dissipation	P <sub>tot</sub>	mW		200
Thermal Resistance	R <sub>thJA</sub>	°C <b>/W</b>		625
Maximum junction temperature	Tj	°C		-55 to +150
Storage temperature range	T <sub>stg</sub>	°C		-55 to +150

### **Electrical Characteristics** (Ta=25°C Unless otherwise specified)

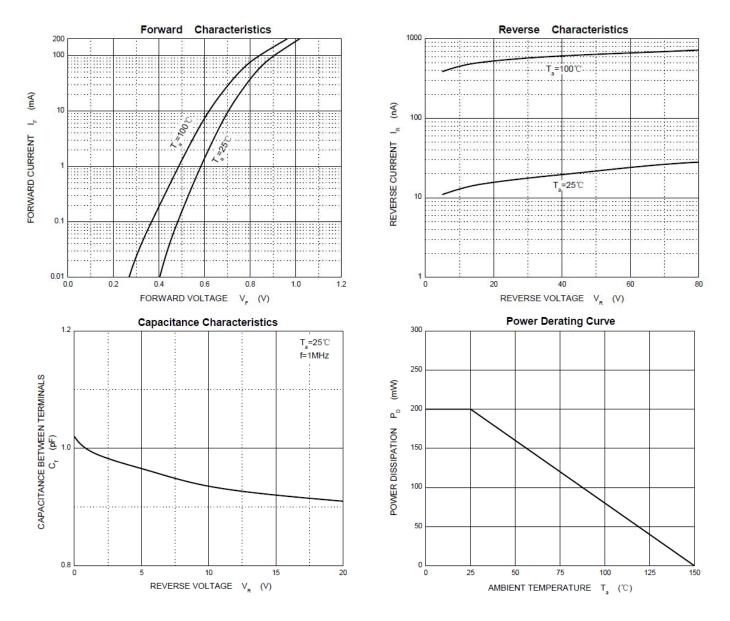
PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Maximum Forward voltage	VF	V	I⊧=10mA	1.0
Maximum Reverse current	I <sub>R</sub>	nA	V <sub>R</sub> =20V	25
Maximum Reverse current	I <sub>R</sub>	μA	V <sub>R</sub> =75V	1.0
Minimum Breakdown voltage	VR	V	I <sub>R</sub> =1µA	75
Maximum Diode capacitance	CD	pF	V <sub>R</sub> =V <sub>F</sub> =0V, f=1MH <sub>Z</sub>	4
Maximum Reverse recovery time	t <sub>rr</sub>	ns	$I_F$ =50mA,Irr=0.1 $I_R$ ,RL=100 $\Omega$	4



### ■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1N4148WS	F2	Approximate 0.004	3000	30000	120000	7" reel

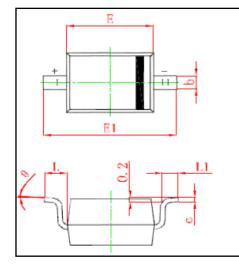
### ■ Characteristics (Typical)

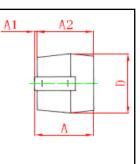


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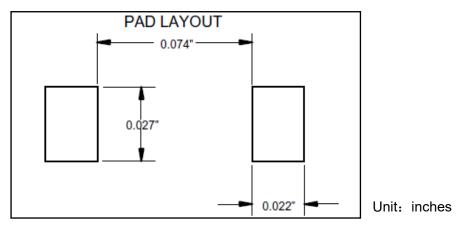
### Outline Dimensions





Symbol	Min. (mm)	Max. (mm)	
А		1.000	
A1	0.000	0.100	
A2	0.800	0.900	
b	0.250	0.400	
С	0. 080	0.150	
D	1.200	1.400	
Е	1.600	1.800	
E1	2. 500	2.700	
L	0. 475REF		
L1	0.250	0.400	
θ	0°	8°	

## Soldering Footprint



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# 1N4148WS

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