

## Silicon Epitaxial Planar Switching Diodes

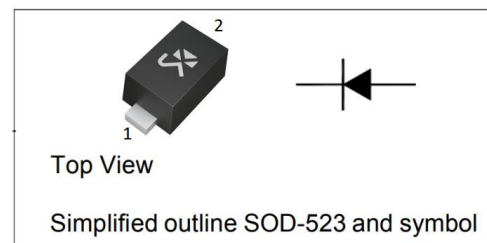
### Features

- Fast switching speed
- Ultra-small surface mount package
- For general purpose switching applications
- High conductance

### Marking:T4

#### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### Absolute Maximum Ratings@T<sub>a</sub> = 25°C unless otherwise specified

Parameter	Symbol	1N4148WT	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	100	V
Maximum RMS Voltage	V <sub>RMS</sub>	75	V
Average Rectified Forward Current	I <sub>F(AV)</sub>	100	mA
Forward Continuous Current	I <sub>FM</sub>	300	mA
Non-Repetitive Peak Forward Surge Current	at 1μs	2	A
	at 100ms	1	A
Total Power Dissipation	P <sub>tot</sub>	150	mW
Thermal Resistance Junction to Ambient Air	R <sub>θJA</sub>	883	°C/W
Operating Temperature Range	T <sub>J</sub>	-55~+150	°C
Storage Temperature Range	T <sub>STG</sub>	-55~+150	°C

### Electrical Characteristics@T<sub>a</sub> = 25 °C, unless specified otherwise

Parameter	Symbol	Test Condition	1N4148WT	Unit
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =1μA	75	V
Maximum Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =1mA	0.715	V
		I <sub>F</sub> =10mA	0.855	V
		I <sub>F</sub> =50mA	1.00	V
		I <sub>F</sub> =150mA	1.25	V
Peak Reverse Current	I <sub>R</sub>	V <sub>R</sub> =20V, T <sub>J</sub> =25°C	0.025	μA
		V <sub>R</sub> =75V, T <sub>J</sub> =25°C	1	μA
		V <sub>R</sub> =25V, T <sub>J</sub> =150°C	30	μA
		V <sub>R</sub> =75V, T <sub>J</sub> =150°C	50	μA
Typical Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =0V, f=1MHz	2	pF
Maximum Revers Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>rr</sub> =0.1*I <sub>R</sub> , R <sub>L</sub> =100Ω	4	ns

## Typical Characteristics

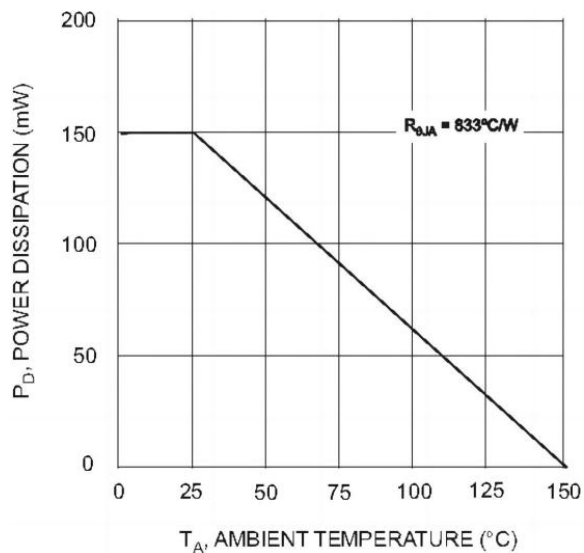


Fig. 1 Derating Curve

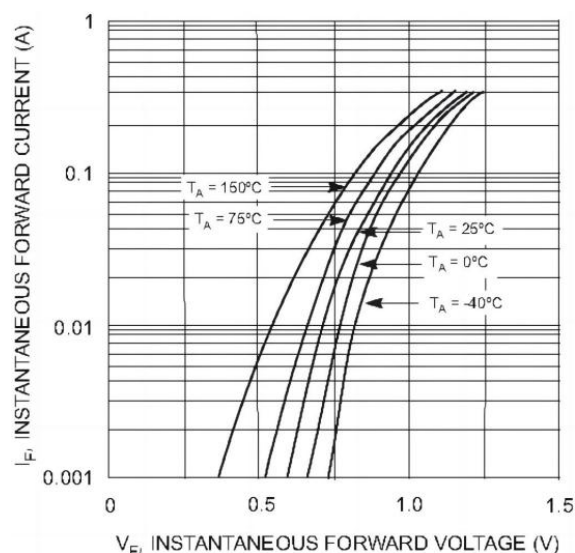


Fig. 2 Forward Characteristics

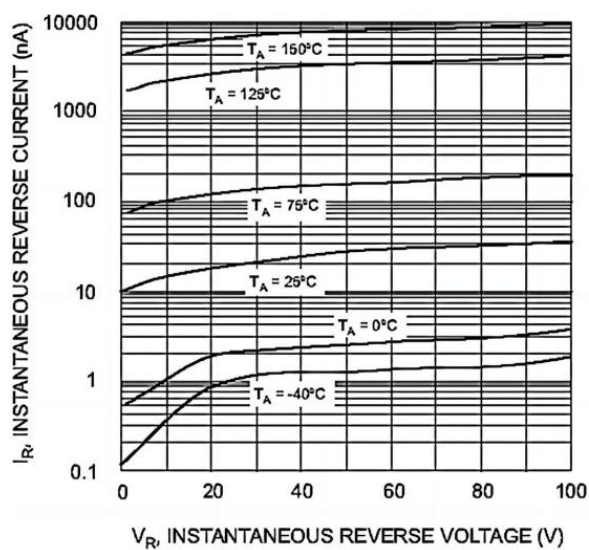


Fig. 3 Typical Reverse Characteristics

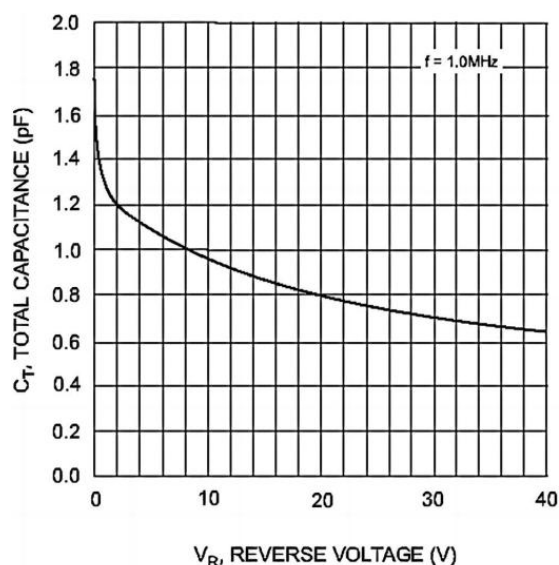
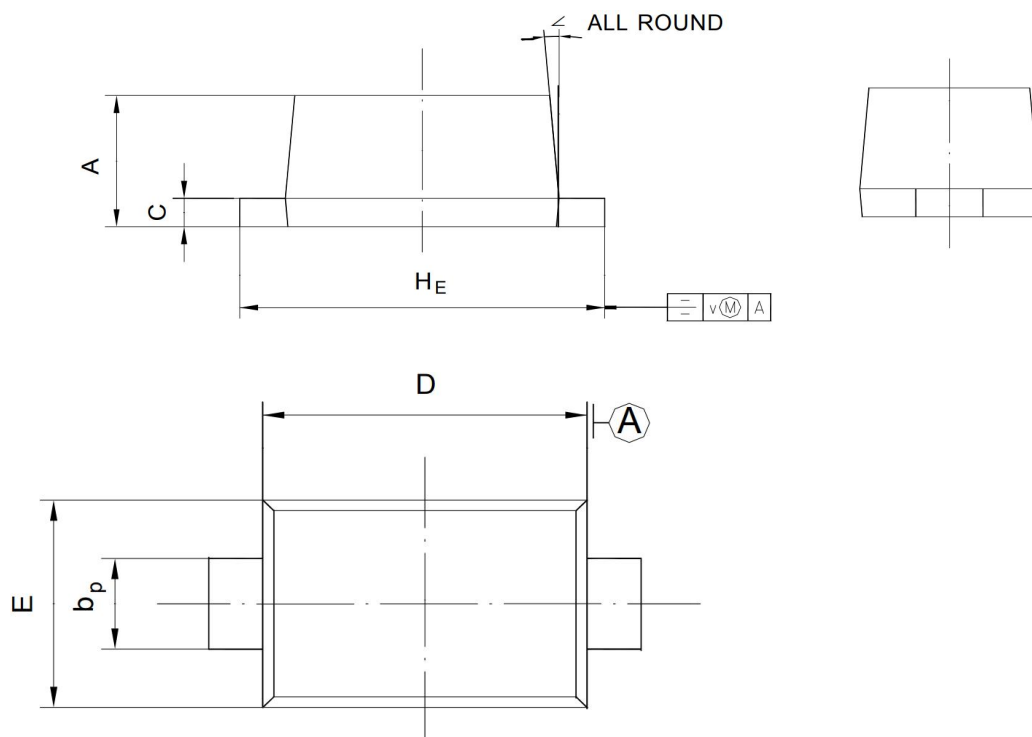


Fig. 4 Typical Capacitance vs. Reverse Voltage

## Package Information

### SOD-523

### Dimensions in mm



UNIT	A	b <sub>p</sub>	C	D	E	H <sub>E</sub>	V	∠
mm	0.70 0.60	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°

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