



1N4148WTH

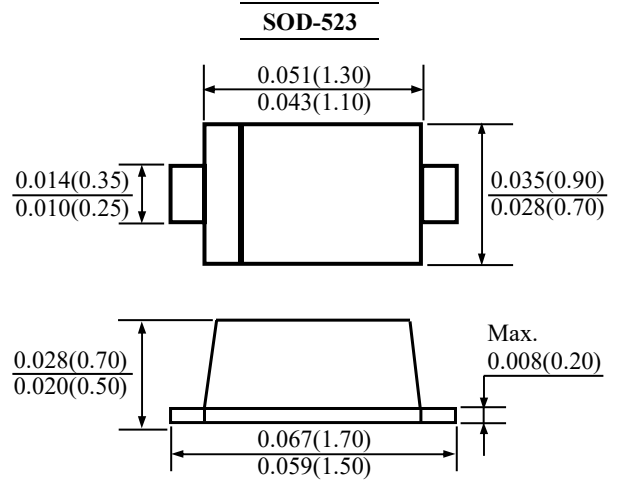
FAST SWITCHING DIODE

FEATURES

- Fast Switching Device ($t_{rr} < 4.0$ ns)
- General Purpose Diodes
- Surface Device Type Mounting
- Suffix "H" indicates Halogen-free parts, ex. 1N4148WTH

MECHANICAL DATA

Case : SOD-523
Polarity : Color band denotes cathode end
Mounting position : Any



Dimensions in inch and (millimeter)

Absolute Maximum Ratings

$T_{amb} = 25$ °C, unless otherwise specified

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	100	V
Continuous Forward Current	I_O	150	mA
Repetitive Peak Forward Current	I_{FRM}	300	mA
Power Dissipation	P_D	200	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{stg}	-55 to +150	°C

Electrical Characteristics

$T_{amb} = 25$ °C, unless otherwise specified

Parameter	Test Condition	Symbol	Min.	Max.	Units
Forward Voltage	$I_F = 10$ mA	V_F	-	1.00	V
Reverse Leakage Current	$V_R = 20$ V	I_R	-	25	nA
	$V_R = 75$ V		-	5	μA
Breakdown Voltage	$I_R = 100$ μA	B_V	100	-	V
	$I_R = 5$ μA		75	-	
Capacitance	$V_R = 0$ V, $f = 1$ MHz	C	-	4	pF
Reverse Recovery Time	$I_F = 10$ mA, $I_R = 60$ mA $R_L = 100$ Ω, $I_{RR} = 1$ mA	t_{rr}	-	4	ns



1N4148WTH

FAST SWITCHING DIODE

RATINGS AND CHARACTERISTIC CURVES

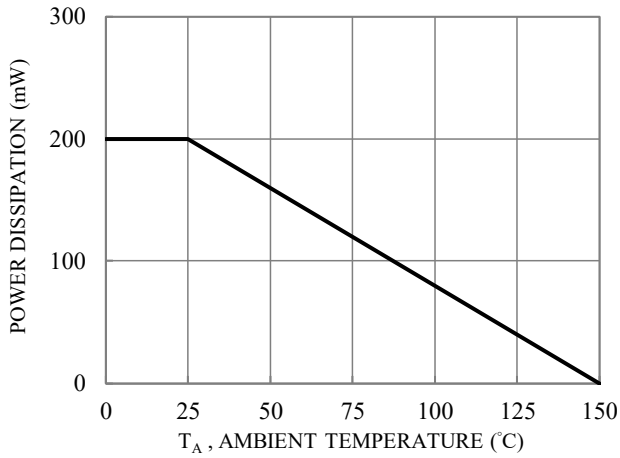


Fig.1-POWER DERATING CURVE

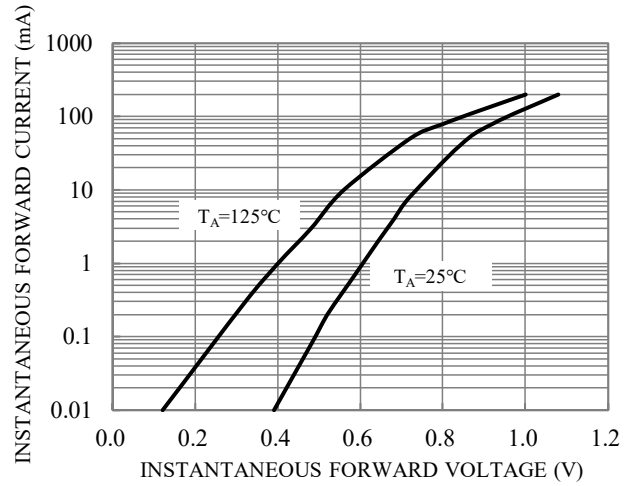


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

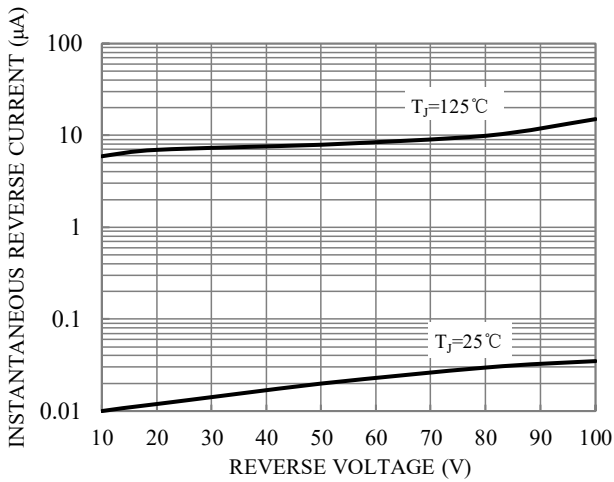


Fig.3-TYPICAL REVERSE CHARACTERISTICS

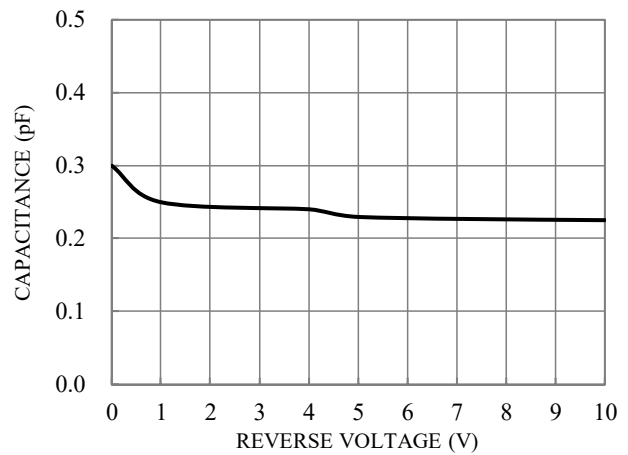


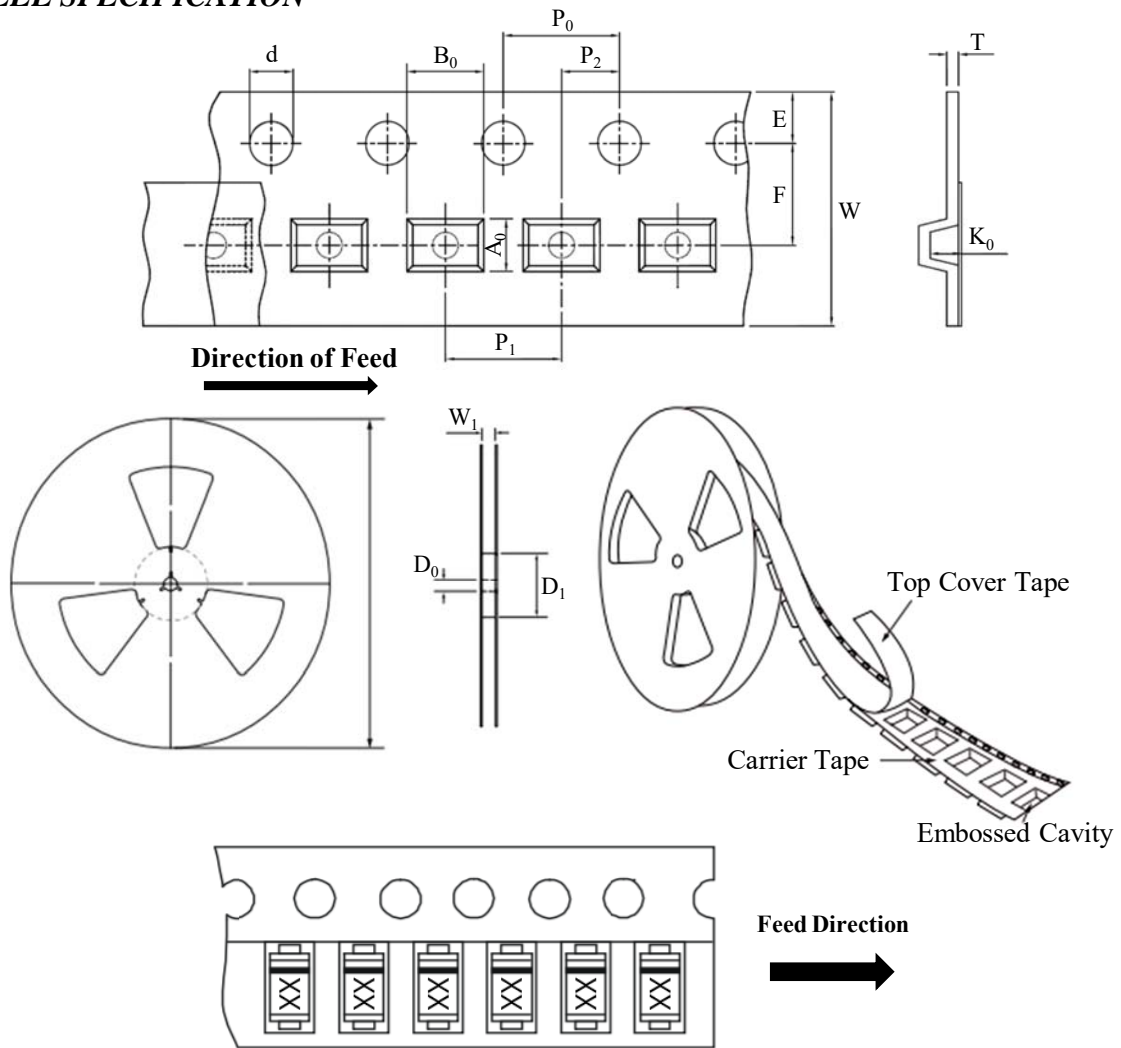
Fig.4- TOTAL CAPACITANCE



1N4148WTH

FAST SWITCHING DIODE

TAPE & REEL SPECIFICATION



Item	Symbol	SOD-523
Carrier width	A_0	0.96 ± 0.10
Carrier length	B_0	1.94 ± 0.10
Carrier depth	K_0	0.73 ± 0.10
Sprocket hole	d	1.50 ± 0.10
Reel outside diameter	D	178.00 ± 2.00
Feed hole width	D_0	13.00 ± 0.50
Reel inner diameter	D_1	MIN. 50.00
Sprocket hole position	E	1.75 ± 0.10
Punch hole position	F	3.50 ± 0.10
Sprocket hole pitch	P_0	4.00 ± 0.10
Punch hole pitch	P_1	2.00 ± 0.10
Embossment center	P_2	2.00 ± 0.10
Overall tape thickness	T	0.20 ± 0.05
Tape width	W	8.00 ± 0.30
Reel width	W_1	MAX. 11.00

ORDER INFORMATION

Package	Reel Size	Quantity
SOD-523	7"	3,000

MARKING CODE

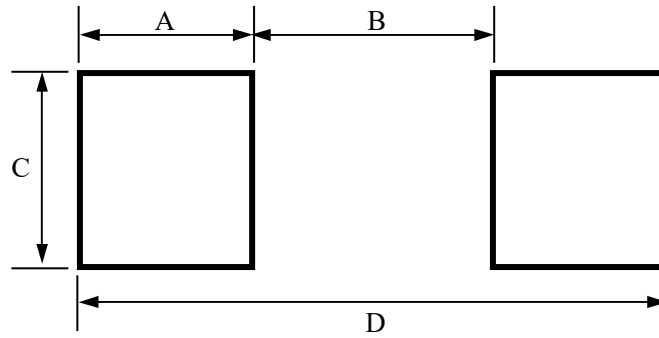
Part Number	Marking Code
1N4148WTH	E1



1N4148WTH

FAST SWITCHING DIODE

SUGGESTED SOLDER PAD LAYOUT



Unit :mm

PACKAGE	A	B	C	D
SOD-523	0.60	0.85	0.70	2.05