



1N4148WH

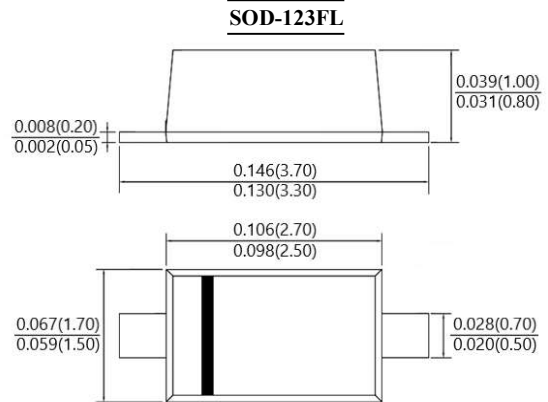
FAST SWITCHING DIODES

FEATURES

- Fast Switching Device ($t_{tr} < 4.0$ ns)
- General Purpose Diodes
- Surface Device Type Mounting
- Suffix "H" indicates Halogen-free parts, ex. 1N4148WH

MECHANICAL DATA

Case : SOD-123FL
 Polarity : Color band denotes cathode end
 Mounting position : Any



Dimensions in inches and (millimeters)

Absolute Maximum Ratings

Tamb = 25 °C, unless otherwise specified

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	75	Volts
Non-Repetitive Peak Reverse Voltage	V_{RSM}	100	Volts
Continuous Forward Current	I_O	150	mAmp
Repetitive Peak Forward Current	I_{FRM}	300	mAmp
Peak Forward Surge Current (Pulse Width=1μs)	I_{FSM}	2	Amp
Power Dissipation	P_D	400	mWatt
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{stg}	-65 to +150	°C

Electrical Characteristics

Tamb = 25 °C, unless otherwise specified

Parameter	Symbol	Test Condition	Min.	Max.	Units
Forward Voltage	V_F	$I_F=10mA$	-	1.0	V
Reverse Leakage Current	I_R	$V_R=20V$	-	25	nA
		$V_R=75V$	-	5	uA
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=100\mu A$	100	-	V
		$I_R=5\mu A$	75	-	
Capacitance	C_{tot}	$V_R=0V, f=1MHz$	-	4	pF
Reverse Recovery Time	t_{tr}	$I_F=10mA, I_R=60mA$ $R_L=100\Omega, I_{RR}=1mA$	-	4	ns



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RATINGS AND CHARACTERISTIC CURVES

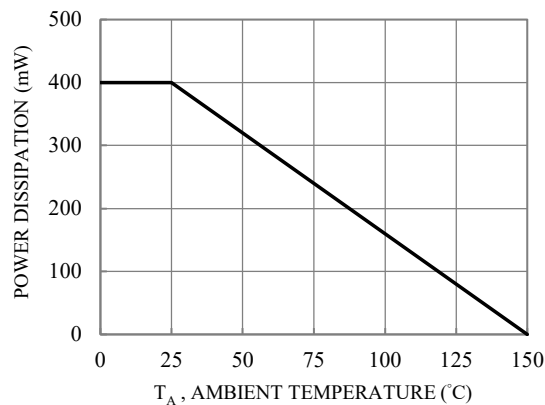


Fig.1-POWER DERATING CURVE

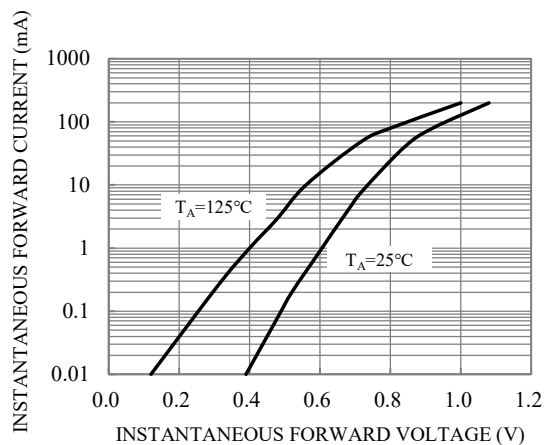


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

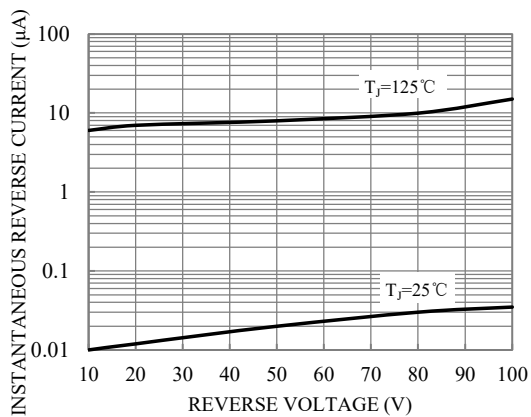


Fig.3-TYPICAL REVERSE CHARACTERISTICS

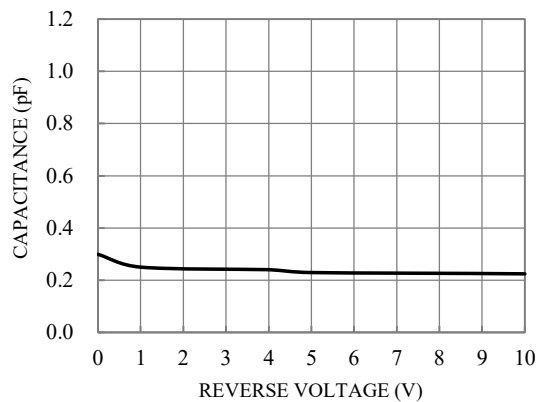


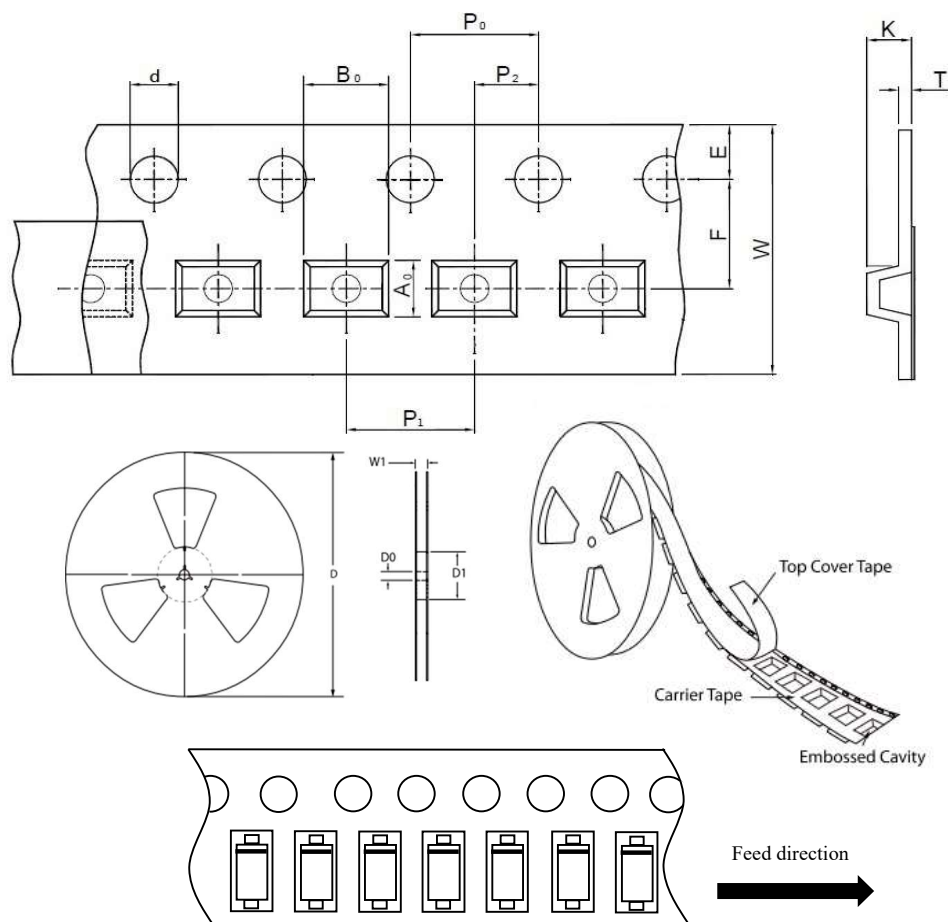
Fig.4- TOTAL CAPACITANCE



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TAPE & REEL SPECIFICATION



Item	Symbol	SOD-123FL
Carrier width	A ₀	3.94 ± 0.10
Carrier length	B ₀	1.85 ± 0.10
Carrier depth	K	1.58 ± 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
Sprocke hole position	E	1.75 ± 0.10
Punch hole position	F	3.50 ± 0.10
Sprocke hole pitch	P ₀	4.00 ± 0.10
Punch hole pitch	P ₁	4.00 ± 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	W1	MAX. 14.50

ORDER INFORMATION

Part Number	Reel Size	Quantity
1N4148WH	7"	3,000

MARKING CODE

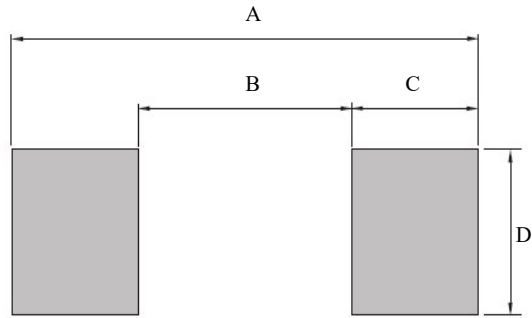
Part Number	Marking Code
1N4148WH	D1



1N4148WH

FAST SWITCHING DIODES

SUGGESTED SOLDER PAD LAYOUT



Unit : mm

PACKAGE	A	B	C	D
SOD-123FL	4.50	2.40	1.05	1.40