

1N4148W

Features

- Halogen free available upon request by adding suffix "-HF"
- Fast switching speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For general purpose switching applications
- High conductance
- Lead Free Finish/RoHS Compliant("P" Suffix designates RoHS Compliant. See ordering information)

High Speed Switching Diode 400mW

Mechanical Data

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Indicated by Cathode Band
- Weight: 0.01 grams (approx.)
- Marking Code: T4,A2

Absolute maximum Ratings

Symbol	Parameter	Rating	Unit
V_{RM}	Peak Repetitive Reverse Voltage	100	V
V_R	DC Reverse Blocking Voltage	100	V
$V_{R(RMS)}$	RMS Reverse Voltage	71	V
I_{FM}	Peak Forward Current	300	mA
I_O	Average Rectified Output Current	150	mA
I_{FSM}	Forward Surge Current @1 μ s @1s	2 1	A
P_D	Power Dissipation	400	mW
$R_{\theta ja}$	Thermal Resistance Junction to Ambient	312.5	$^{\circ}$ C/W
T_J	Operating Junction Temperature	-65 to +150	$^{\circ}$ C
T_{STG}	Storage Temperature	-65 to +150	$^{\circ}$ C

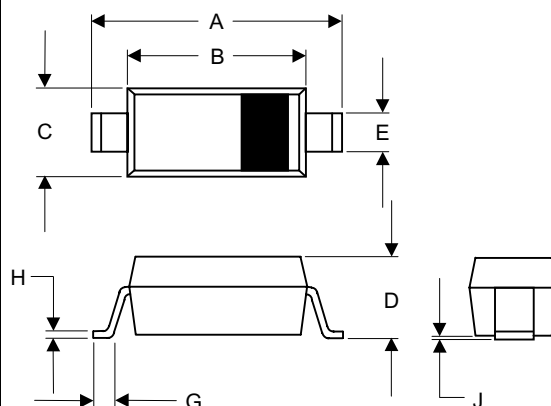
Electrical Characteristics @ 25 $^{\circ}$ C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
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OFF CHARACTERISTICS

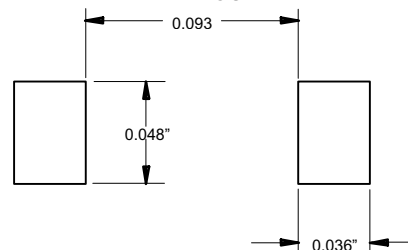
V_F	Forward Voltage Drop ($I_F=1mA_{dc}$) ($I_F=10mA_{dc}$) ($I_F=50mA_{dc}$) ($I_F=150mA_{dc}$)	---	0.715 0.855 1.00 1.25	Vdc
I_R	Reverse Current ($V_R=75V_{dc}, T=25^{\circ}C$) ($V_R=20V_{dc}, T=25^{\circ}C$) ($V_R=75V_{dc}, T=150^{\circ}C$)	---	1.0 0.025 50	μA_{dc}
C_T	Total Capacitance ($V_R=0V_{dc}, f=1.0MHz$)	---	2.0	pF
T_{rr}	Reverse Recovery Time ($I_{rr}=0.1I_R, I_F=I_R10mA_{dc}, R_L=100\Omega$)	---	4.0	ns

SOD123



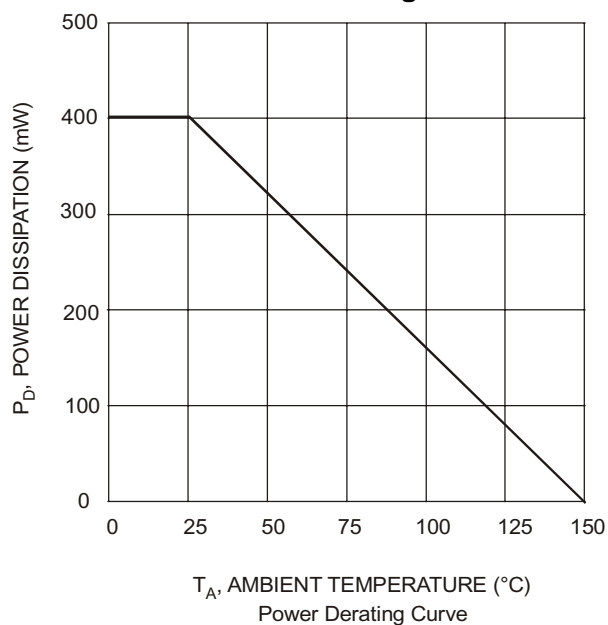
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	----	.053	----	1.35	
E	.012	.026	0.30	.66	
G	.006	----	0.15	----	
H	----	.01	----	.25	
J	----	.006	----	.15	

SUGGESTED SOLDER PAD LAYOUT

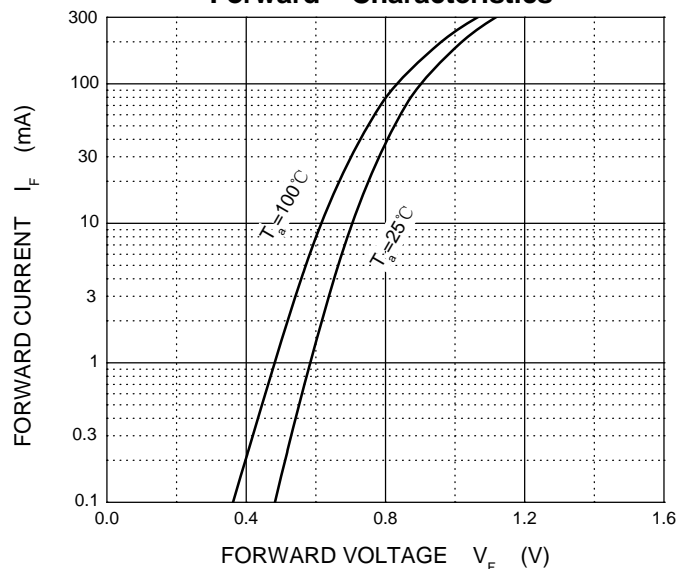


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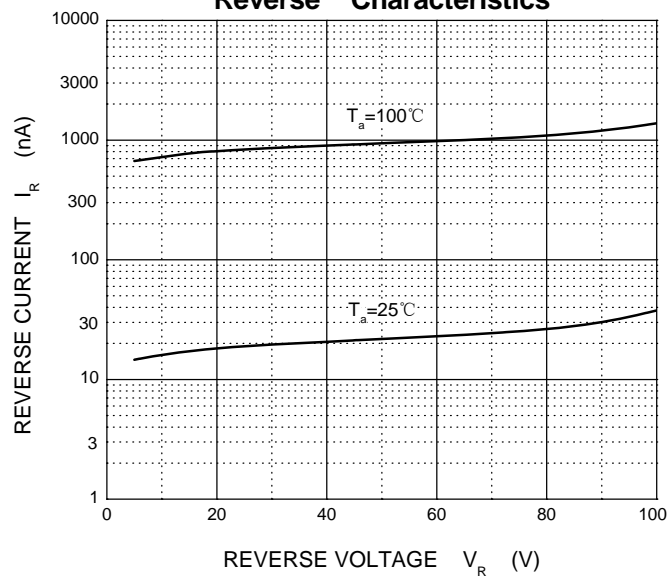
Power Derating Curve



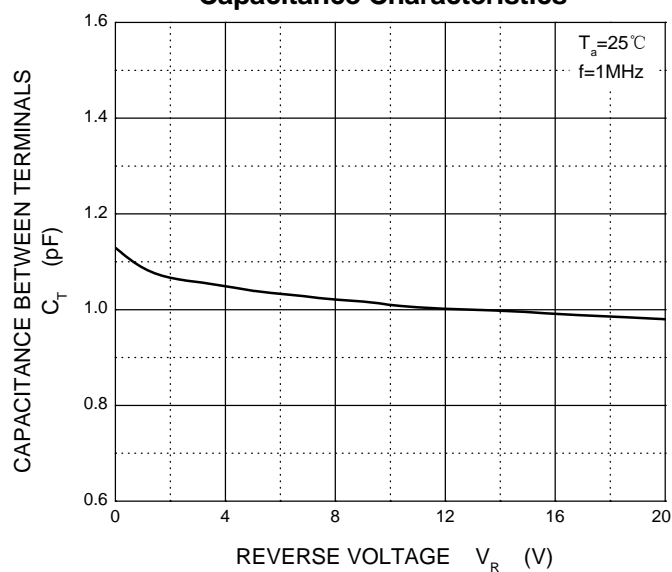
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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