



Micro Commercial Components



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1N4148W

High Speed Switching Diode 400mW

Features

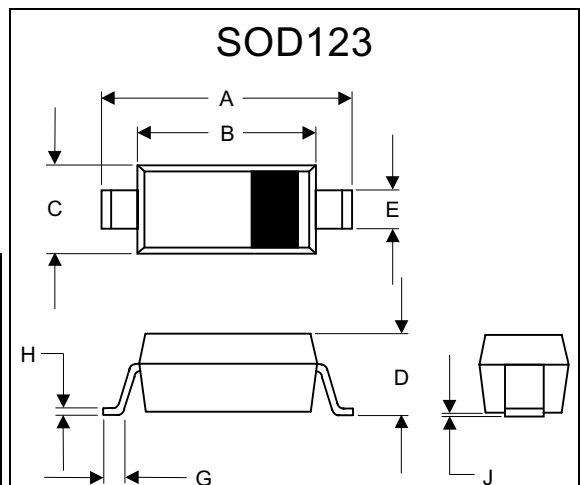
- Halogen free available upon request by adding suffix "-HF"
- Fast switching speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For general purpose switching applications
- High conductance
- Lead Free Finish/RoHS Compliant("P" Suffix designates RoHS Compliant. See ordering information)

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 @1us	2	A
	@1s	1	
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	$^{\circ}C$



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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	.031	0.30	.78	
G	.006	-----	0.15	-----	
H	-----	.01	-----	.25	
J	-----	.006	-----	.15	

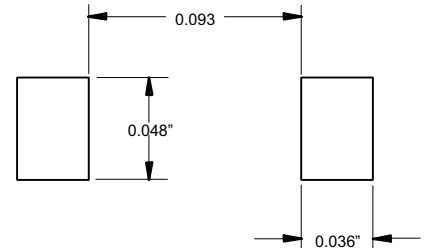
Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
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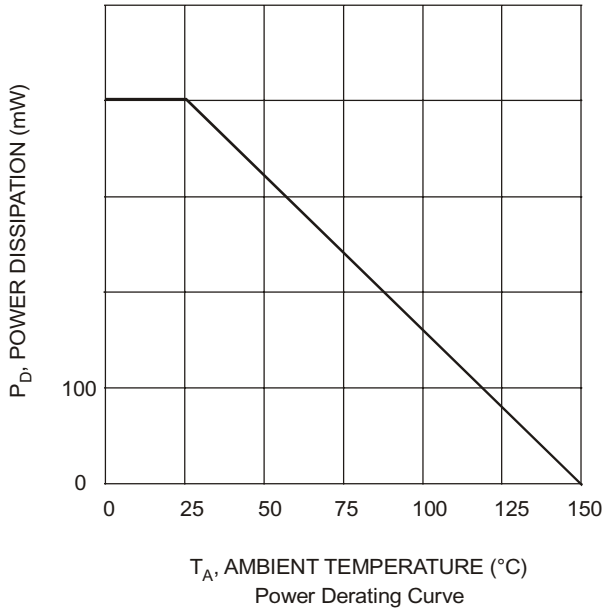
OFF CHARACTERISTICS

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

SUGGESTED SOLDER PAD LAYOUT



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T_A , AMBIENT TEMPERATURE ($^{\circ}C$)
Power Derating Curve



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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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