

Features

- Surface Mount Package Ideally Suited for Automatic Insertion
- · For General Purpose Switching Applications
- · Fast Switching Speed
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

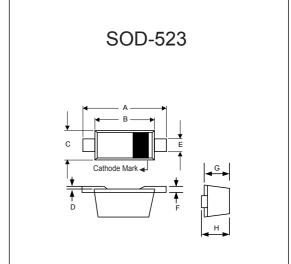
Maximum Ratings

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Thermal Resistance:625°C/W Junction to Ambient

MCC Part Number	Device Marking		
1N4148X	T4		

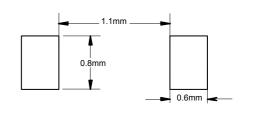
Parameter	Symbol	Value	
DC Reverse Voltage	V _R	100V	
Working Peak Reverse Voltage	V_{RWM}	100V	
RMS Reverse Voltage	$V_{R(RMS)}$	71V	
Forward Continuous Current	I _{FM}	300mA	
Average Rectified Output Current	Io	150mA	
Peak Forward Surge Current (t=1µs)	ı	2A	
(t=1s)	I _{FSM}	1A	
Power Dissipation	P_{D}	200mW	

200mW Switching Diodes



DIMENSIONS					
DIM	INCHES		MM		NOTE
DIIVI	MIN	MAX	MIN	MAX	NOIL
Α	0.059	0.067	1.50	1.70	
В	0.043	0.051	1.10	1.30	
С	0.030	0.033	0.75	0.85	
D	0.001	0.003	0.01	0.07	
E	0.010	0.014	0.25	0.35	
F	0.003	0.006	0.08	0.15	
G	0.020	0.028	0.50	0.70	
Н	0.020	0.031	0.51	0.77	

Suggested Solder Pad Layout





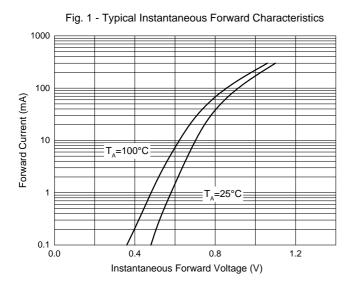
Electrical Characteristics @ 25°C (Unless Otherwise Specified)

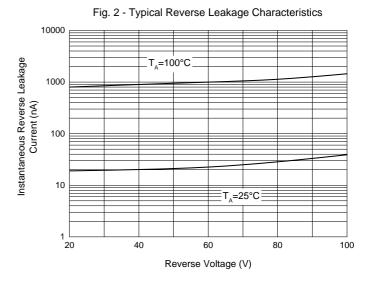
Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units																												
	V _F	I _F =1mA			0.715	V																												
Forward Voltage		I _F =10mA			0.855	V																												
		I _F =50mA			1	V																												
		I _F =150mA			1.25	V																												
	I _R	V _R =20V, T _J =25°C			25	nA																												
Reverse Current		V _R =75V, T _J =25°C			1	μΑ																												
																						İ									V _R =75V, T _J =150°C			50
Junction Capacitance	CJ	$V_R = 0V$, $f = 1MHz$			2	pF																												
Reverse Recovery Time	t _{rr}	$I_F = I_R = 10 \text{mA},$ $I_{rr} = 0.1 \cdot I_R, R_L = 100 \Omega$			4	ns																												

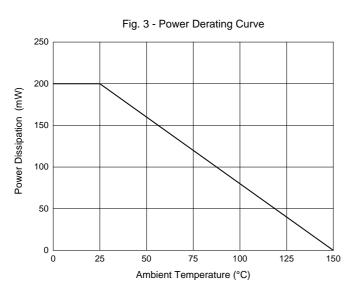
^{*} Pulse Test: Pulse Width 300 µsec, Duty Cycle 2%



Curve Characteristics









Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 8Kpcs/Reel

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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