

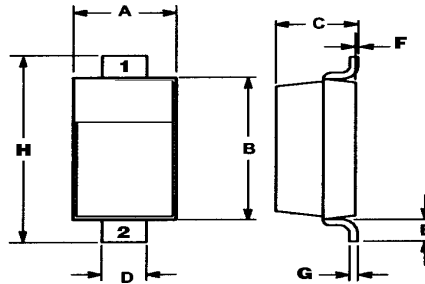
Description

Mechanical Dimensions

1N4148W



SOD-123



DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.055	0.071	1.40	1.80
B	0.100	0.112	2.55	2.85
C	0.037	0.053	0.95	1.35
D	0.020	0.028	0.50	0.70
E	0.004		0.25	
F	0.000	0.004	0.00	0.10
G		0.006		0.15
H	0.140	0.152	3.55	3.85

FEATURES

- Fast Switching Speed
- High Conductance
- Marking: T4
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications

Maximum Ratings and Electrical Characteristics, Single Diode @T_a=25°C

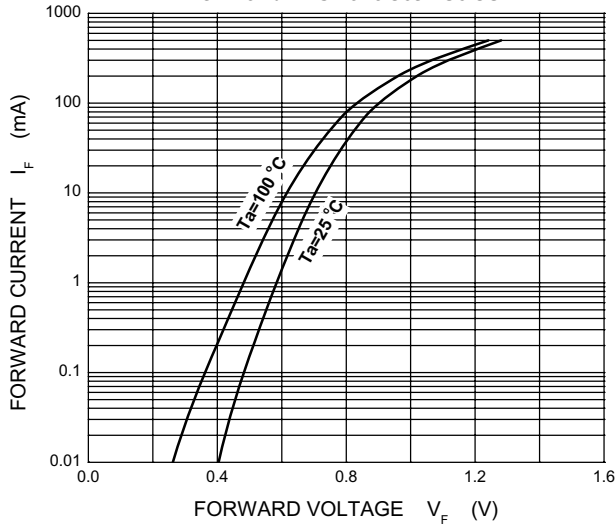
Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	71	V
Forward Continuous Current	I _{FM}	300	mA
Average Rectified Output Current	I _O	150	mA
Peak Forward Surge Current @t=1.0μs	I _{FSM}	2.0	A
@t=1.0s		1.0	
Power Dissipation	P _d	500	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	250	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55~+150	°C

Electrical Ratings @T_a=25°C

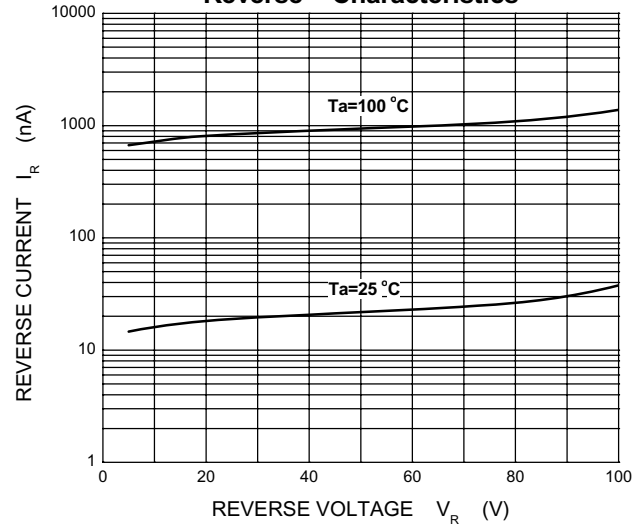
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V _{F1}			0.715	V	I _F =1mA
	V _{F2}			0.855	V	I _F =10mA
	V _{F3}			1.0	V	I _F =50mA
	V _{F4}			1.25	V	I _F =150mA
Reverse current	I _{R1}			1	μA	V _R =75V
	I _{R2}			25	nA	V _R =20V
Capacitance between terminals	C _T			2	pF	V _R =0V, f=1MHz
Reverse recovery time	t _{rr}			4	ns	I _F =I _R =10mA I _{rr} =0.1X I _R , R _L =100Ω

Typical Characteristics 1N4148W

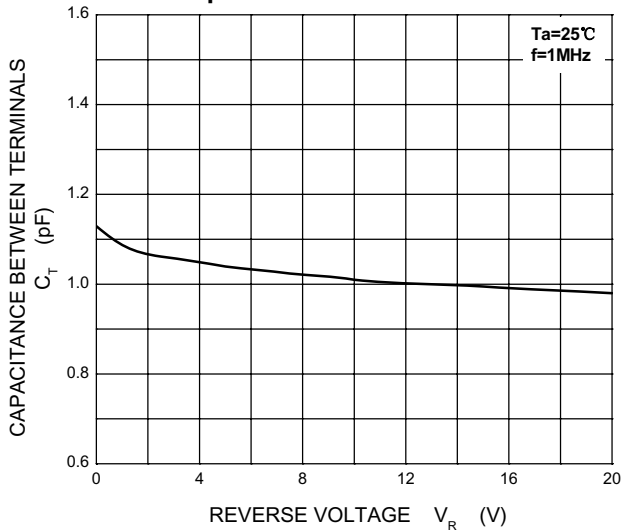
Forward Characteristics



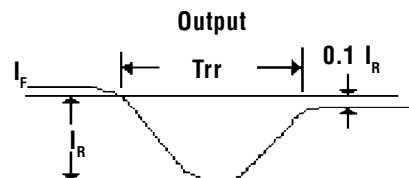
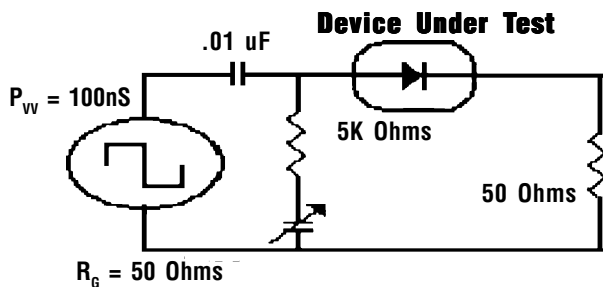
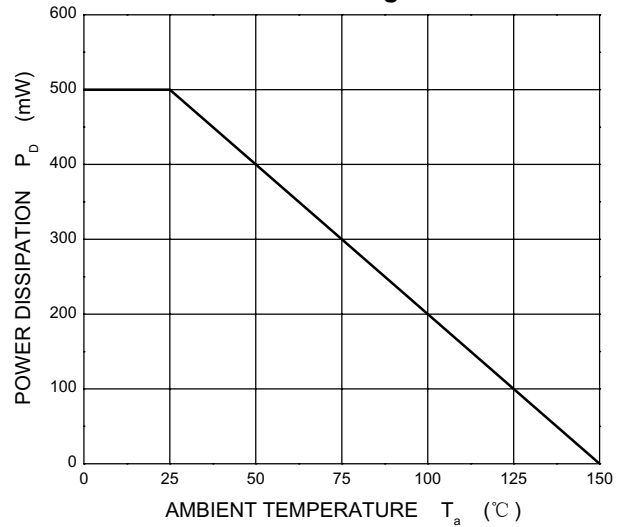
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve



1N4148W High Speed Switching Diode

