

Descriptions

The 1N4148W is silicon diode, SOD-123 plastic package.

Features

- Fast switching diodes
- Halogen-free Product

Applications

Small signal diode

Equivalent Circuit



Pinning



PIN1:Cathode PIN2:Anode

Marking

Marking	HA2
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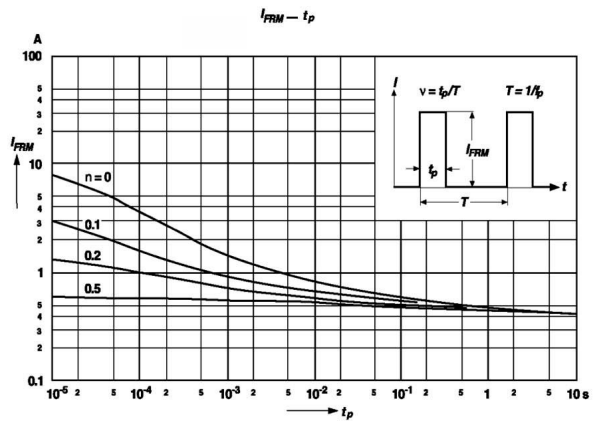
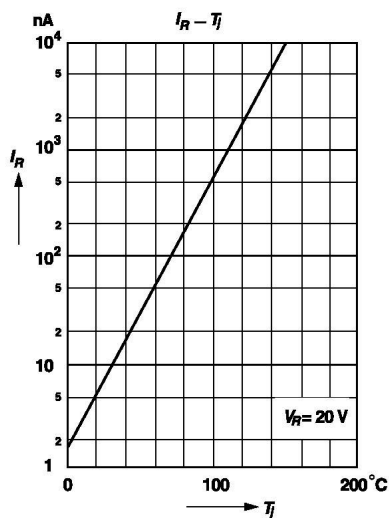
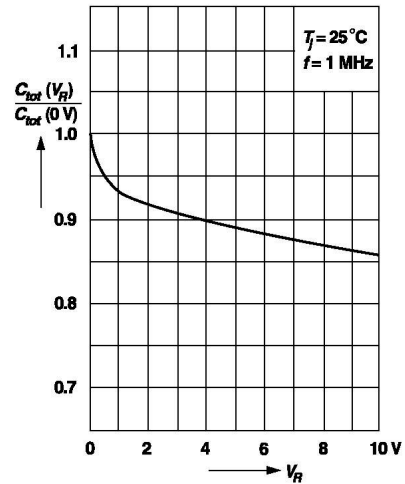
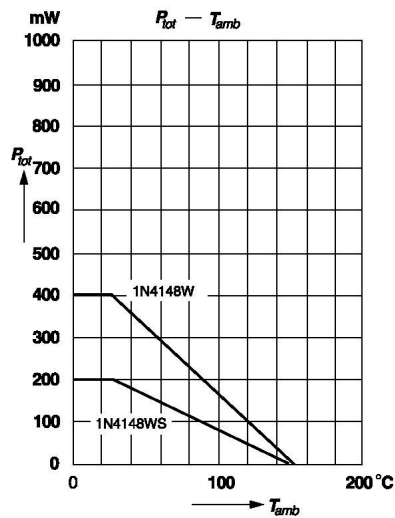
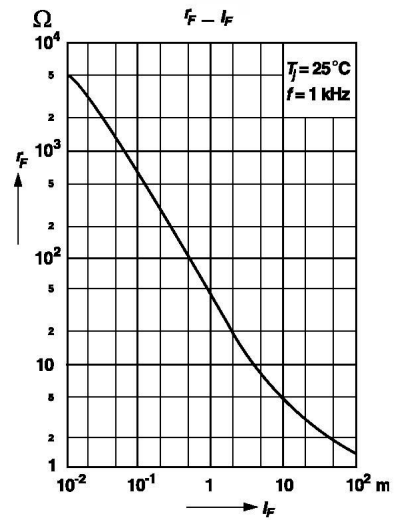
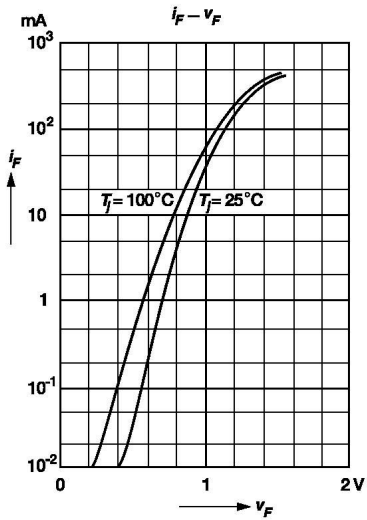
Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating	Unit
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Rectified Current (Average)	I_O	150	mA
Forward Continuous Current	I_{FM}	300	mA
Surge Forward Current	$I_{FSM} (t=1.0\mu s)$	2.0	A
	$I_{FSM} (t=1.0s)$	1.0	A
Power Dissipation	P_{tot}	400	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	450	°C/W

Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=10mA$			1.0	V
Instantaneous Reverse Current	I_R	$V_R=20V$			25	nA
		$V_R=75V$			5	μA
		$V_R=20V$ $T_j=150^\circ C$			50	μA
Capacitance	C_{tot}	$V_F=V_R=0V$			4	pF
Reverse Recovery Time	t_{rr}	$I_F=10mA$ $V_R=6.0V$ $I_R=1mA$ $R_L=100\Omega$			4	ns
Voltage Rise when Switching On tested	V_{fr}	$t_p=0.1\mu s$ $f_p=5to100kHz$ Time<30ns			2.5	V
Total Capacitance	C_T	$V_R=0$ $f=1.0MHz$			5.0	pF

Electrical Characteristic Curve



Marking Instructions



Note:

H: Company Code.

A2: Product Type.

Packaging SPEC

REEL

Package Type	Units					Dimension (unit: mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOD-123	3,000	10	30,000	6	180,000	7" x8	180×120×180	390×385×205

Package Outline Dimensions

