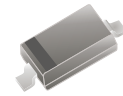


## 1N4448WS-HF

RoHS Device

Halogen Free

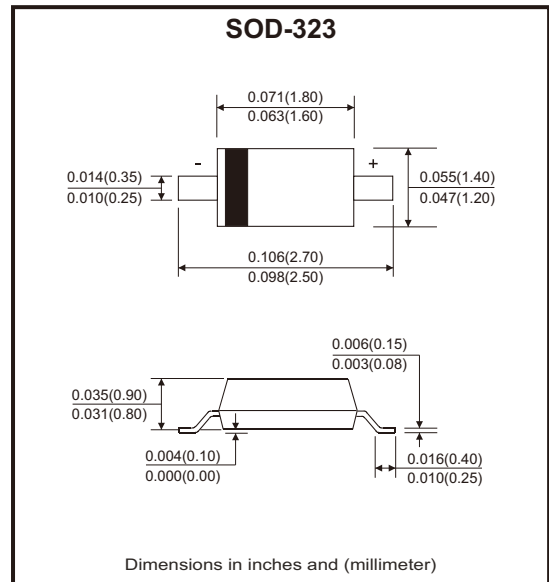


### Features

- Fast switching device ( $T_{rr} < 4.0nS$ ).
- Power dissipation of 200mW.
- High stability and high reliability.
- Low reverse leakage.

### Mechanical data

- Case: SOD-323, molded plastic.
- Polarity: Color band denotes cathode end.
- Epoxy UL: 94V-0.
- Mounting position: Any.



### Circuit Diagram



### Maximum Rating (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Reverse voltage	$V_R$	75	V
Peak reverse voltage	$V_{RM}$	100	V
Power dissipation	$P_D$	200	mW
Working inverse voltage	$W_{IV}$	75	V
Average rectified current	$I_o$	250	mA
Non-repetitive peak forward current	$I_{FM}$	500	mA
Non-repetitive peak forward surge current @ t=8.3ms	$I_{FSM}$	2	A
Operating junction temperature	$T_j$	150	°C
Storage temperature range	$T_{STG}$	-55 to +150	°C

Note: Valid provided that electrodes are kept at ambient temperature.

## Electrical Characteristics (at Ta=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Breakdown voltage	$I_R = 100\mu A$	$B_V$	100			V
	$I_R = 5\mu A$		75			
Reverse leakage current	$V_R = 20V$	$I_R$			25	nA
	$V_R = 75V$				2.5	$\mu A$
Forward voltage	$I_F = 5mA$	$V_F$	0.62		0.72	V
	$I_F = 10mA$				0.855	
	$I_F = 100mA$				1.00	
	$I_F = 150mA$				1.25	
Reverse recovery time	$I_F = 10mA, I_R = 10mA, R_L = 100\Omega, I_{RR} = 0.1mA$	$T_{RR}$			4	nS
Capacitance	$V_R = 0V, f = 1MHz$	$C$			4	pF

## Typical Rating and Characteristic Curves (1N4448WS-HF)

Fig.1 - Forward Characteristics

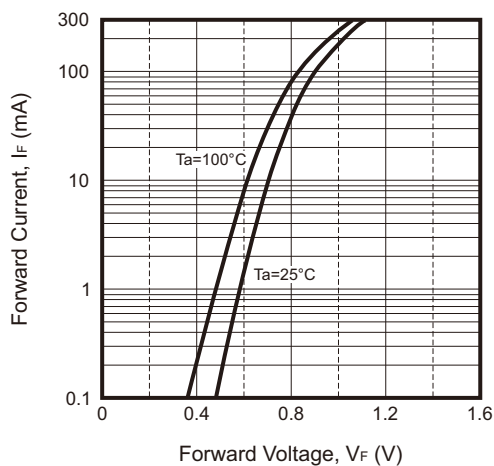


Fig.2 - Reverse Characteristics

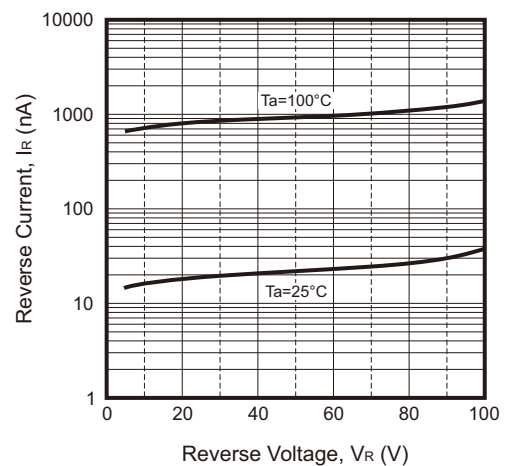


Fig.3 - Capacitance Characteristics

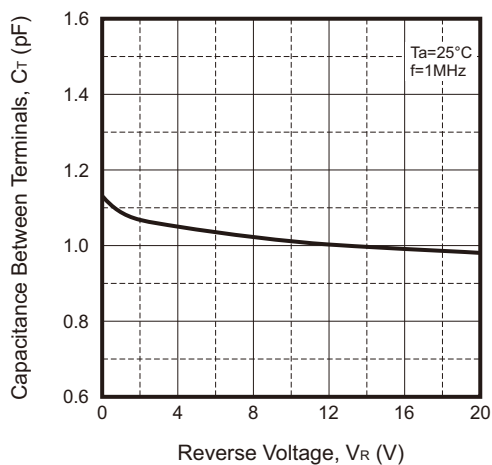
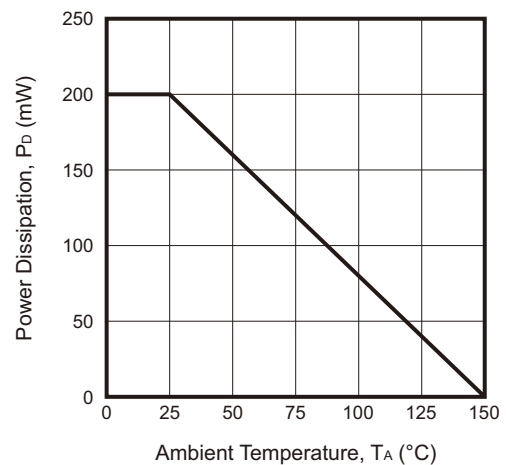
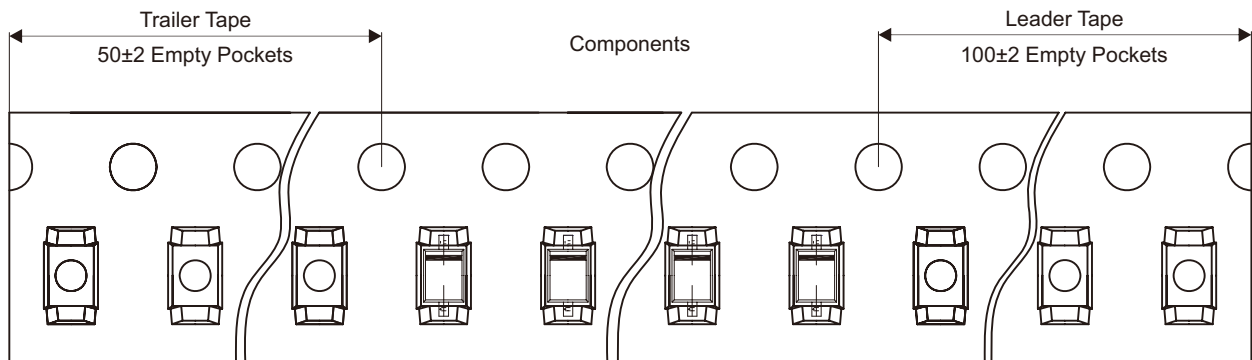
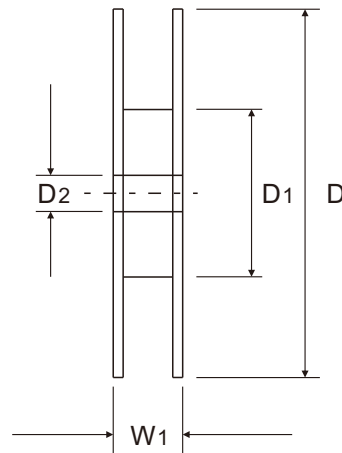
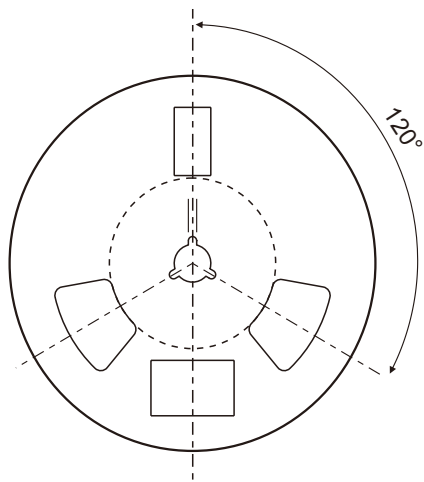
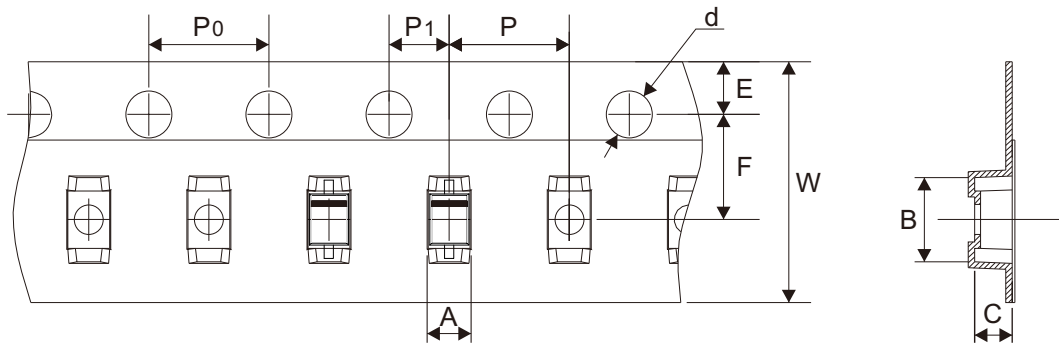


Fig.4 - Power Derating Curve



## Reel Taping Specification

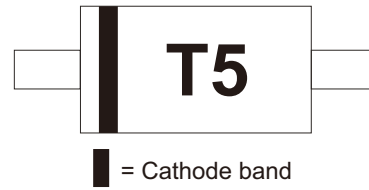


SOD-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.46 ± 0.05	2.90 ± 0.05	1.25 ± 0.05	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.057 ± 0.002	0.114 ± 0.002	0.049 ± 0.002	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOD-323	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	8.00 + 0.30 - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.315 + 0.012 - 0.004	0.484 ± 0.039

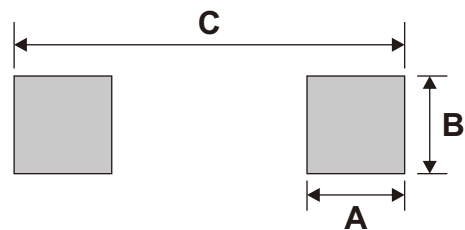
## Marking Code

Part Number	Marking Code
1N4448WS-HF	T5



## Suggested P.C.B. PAD Layout

SIZE	SOD-323	
	(mm)	(inch)
A	0.80	0.031
B	0.80	0.031
C	3.00	0.118



## Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-323	3,000	7