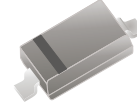


1N4148W-P2-HF

RoHS Device
Halogen Free



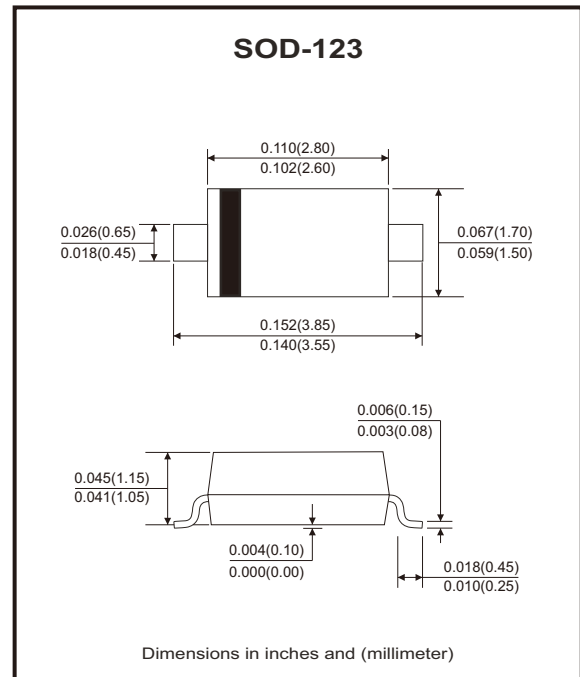
Features

- Fast switching speed.
- For general purpose switching applications.
- High conductance.

Mechanical data

- Case: SOD-123, molded plastic.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any.

Circuit Diagram



Maximum Ratings (at TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-repetitive peak reverse voltage	V_{RM}	100	V
Repetitive peak reverse voltage	V_{RRM}	100	V
RMS reverse voltage	V_{RMS}	75	V
Forward continuous current	I_{FM}	300	mA
Average rectified output current	I_O	150	mA
Non-repetitive peak forward surge current @ t = 8.3ms	I_{FSM}	2	A
Power dissipation	P_D	350	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	357	°C/W
Thermal resistance junction to case	$R_{\theta JC}$	314	°C/W
Junction temperature	T_J	150	°C
Storage temperature range	T_{STG}	-55 to +150	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 1\text{mA}$	V_F			0.715	V
	$I_F = 10\text{mA}$	V_F			0.855	
	$I_F = 50\text{mA}$	V_F			1	
	$I_F = 150\text{mA}$	V_F			1.25	
Reverse current	$V_R = 75\text{V}$	I_R			1	μA
	$V_R = 20\text{V}$	I_R			25	nA
Capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$	C_J			2	pF
Reverse recovery time	$I_F = I_R = 10\text{mA}$, $I_{rr} = 1\text{mA}$, $R_L = 100\Omega$	t_{rr}			4	nS

Typical Rating and Characteristic Curves (1N4148W-P2-HF)

Fig.1 - Typical Instantaneous Forward Characteristics

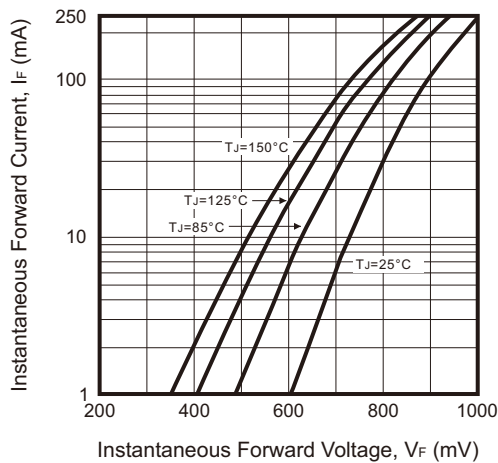


Fig.2 - Typical Reverse Leakage Characteristics

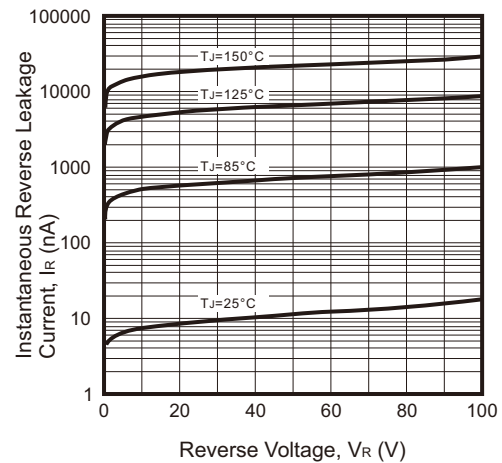


Fig.3 - Power Derating Curve

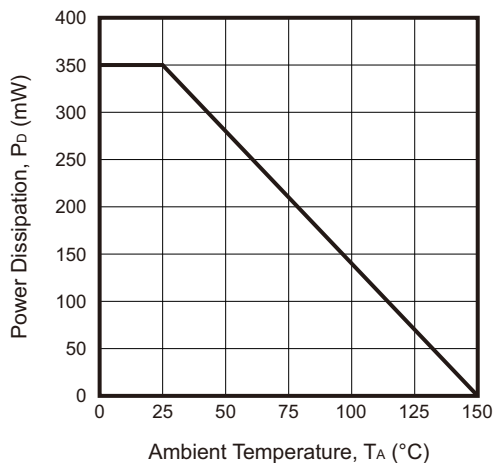
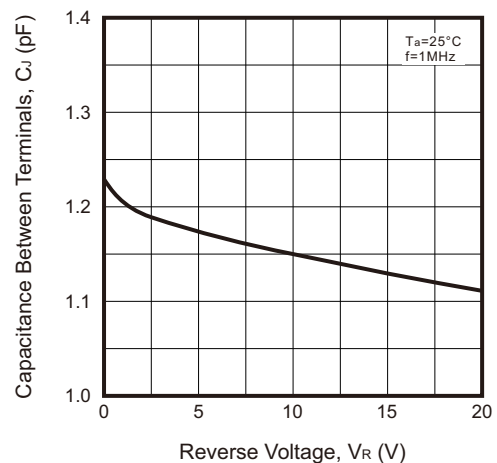
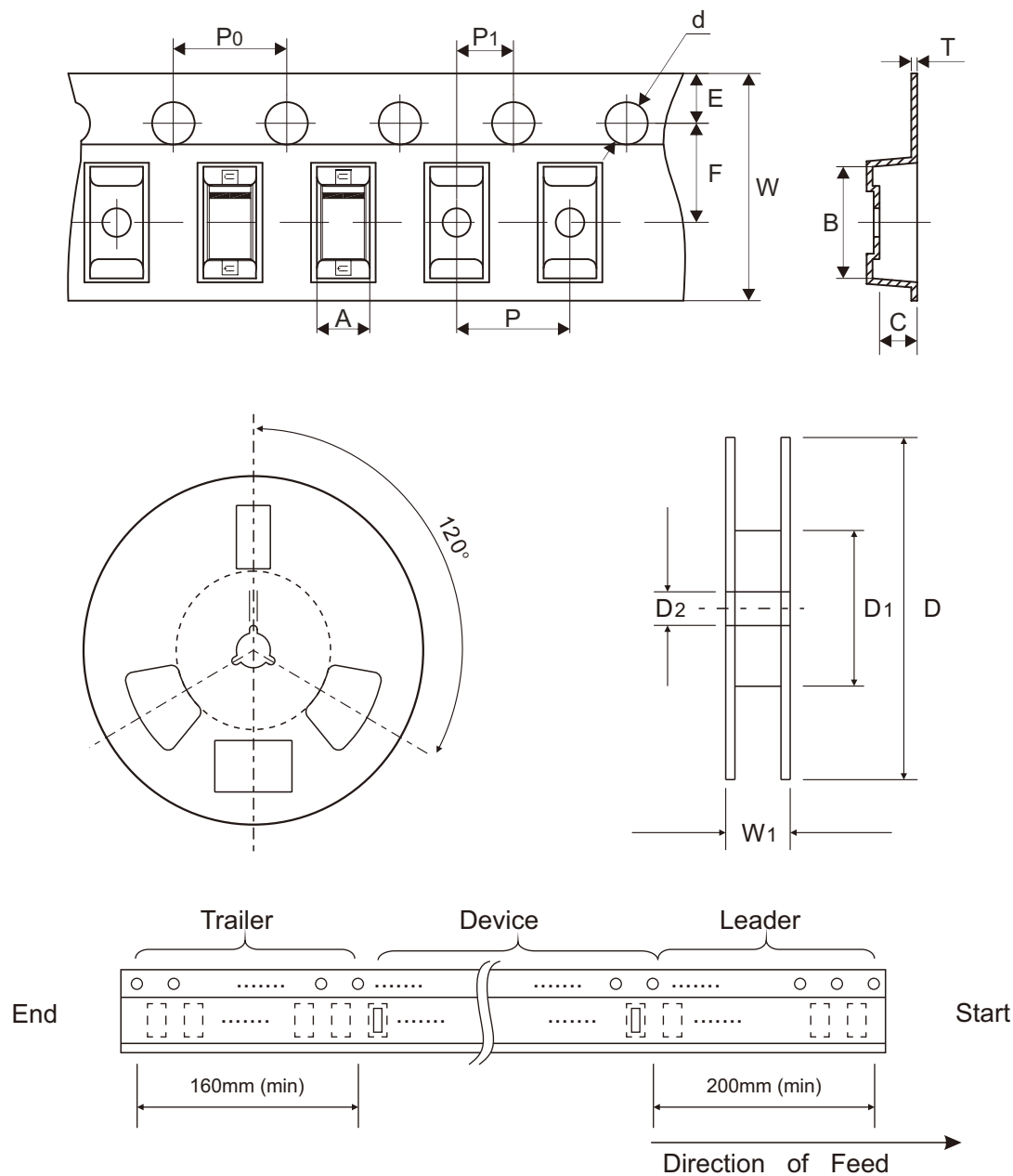


Fig.4 - Capacitance Characteristics



Reel Taping Specification



SOD-123	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.85 ± 0.10	3.94 ± 0.10	1.57 ± 0.10	1.55 ± 0.05	178.00 ± 2.00	50.00 ± 0.50	13.00 ± 0.25
	(inch)	0.073 ± 0.004	0.155 ± 0.004	0.062 ± 0.004	0.061 ± 0.002	7.008 ± 0.079	1.969 ± 0.020	0.512 ± 0.010

SOD-123	SYMBOL	E	F	P	P1	P0	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	4.00 ± 0.10	0.20 ± 0.02	8.00 + 0.30 - 0.10	11.50 ± 1.50
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.157 ± 0.004	0.008 ± 0.001	0.315 + 0.012 - 0.004	0.453 ± 0.059

Marking Code

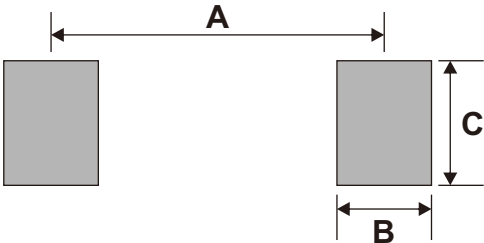
Part Number	Marking Code	
1N4148W-P2-HF	T4	T4



 = Cathode band

Suggested P.C.B. PAD Layout

SIZE	SOD-123	
	(mm)	(inch)
A	3.24	0.128
B	0.80	0.031
C	1.00	0.039



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-123	3,000	7