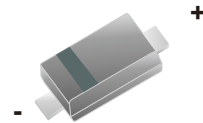


1SS400-HF

Reverse Voltage: 90 V
Rectifying Current: 100 mA
RoHS Device
Halogen Free



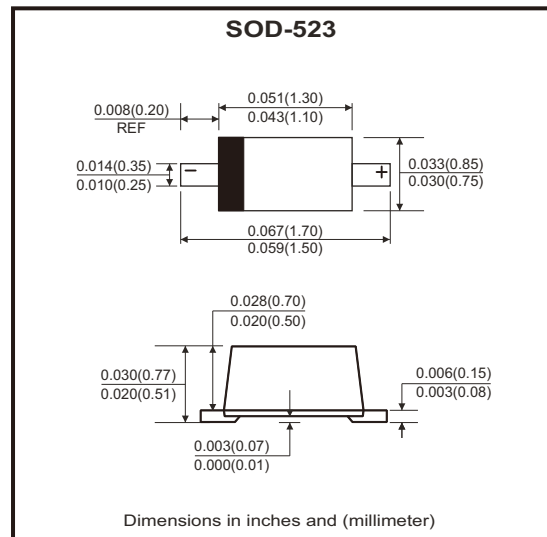
Features

- High speed.
- Small surface mounting type.
- High reliability with high surge current handling capability.

Mechanical data

- Case: SOD-523 standard package, Molded Plastic.
- Mounting position: Any

Circuit Diagram



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

Parameter	Symbol	1SS400-HF	Unit
Non-repetitive peak reverse voltage	V_{RM}	90	V
DC blocking voltage	V_R	80	V
Forward continuous current	I_{FM}	225	mA
Average rectified output current	I_o	100	mA
Non-repetitive peak forward surge current @ t=8.3ms	I_{FSM}	2	A
Power dissipation	P_D	150	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	833	°C/W
Junction temperature	T_J	150	°C
Storage temperature range	T_{STG}	-55 ~ +150	°C

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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F=100mA$			1.2	V
Reverse current	I_R	$V_R=80V$			0.1	μA
Capacitance between terminals	C_T	$V_R=0.5V, f=1.0MHz$			3.0	pF
Reverse recovery time	t_{rr}	$V_R=6V, I_F=10mA, R_L=100\Omega$			4.0	nS

Rating and Characteristic Curves (1SS400-HF)

Fig.1 - Forward Characteristics

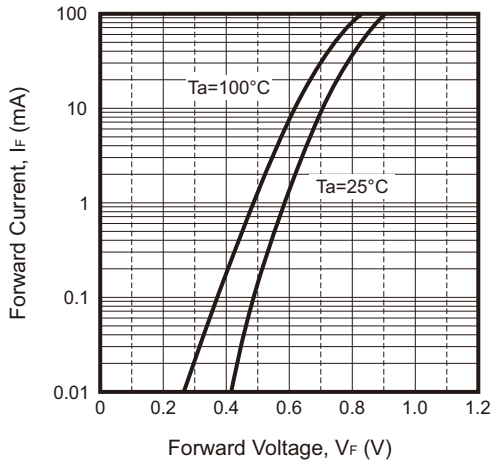


Fig.2 - Reverse Characteristics

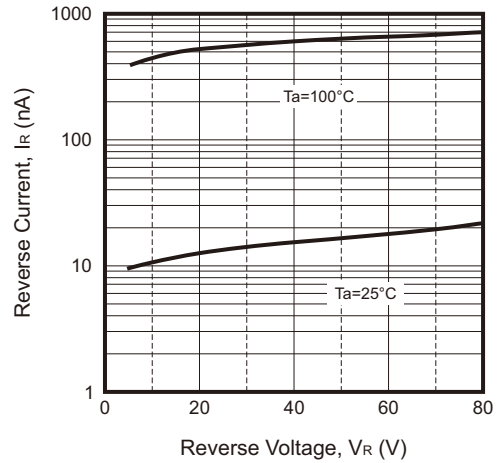


Fig.3 - Capacitance Characteristics

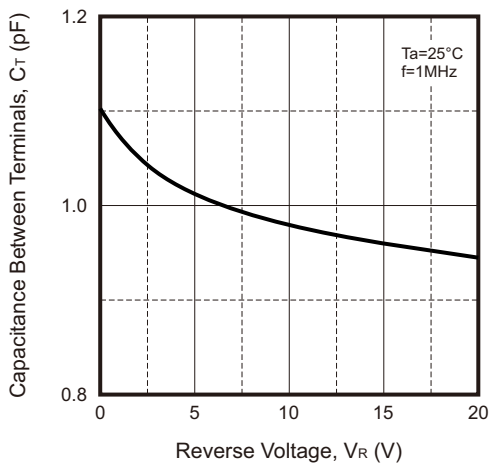
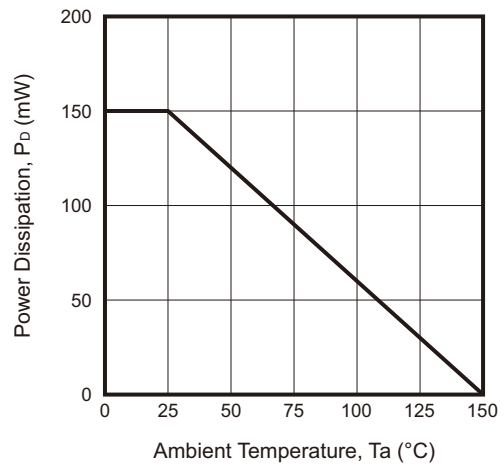
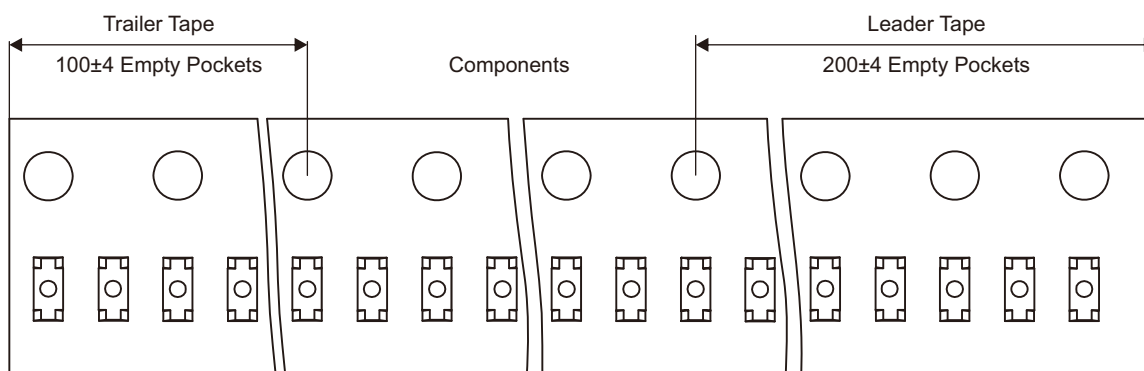
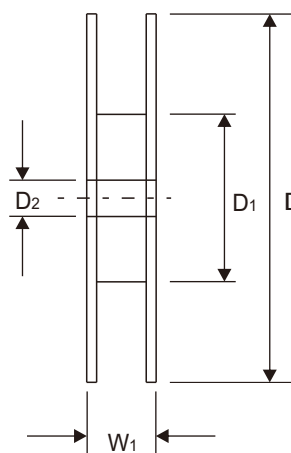
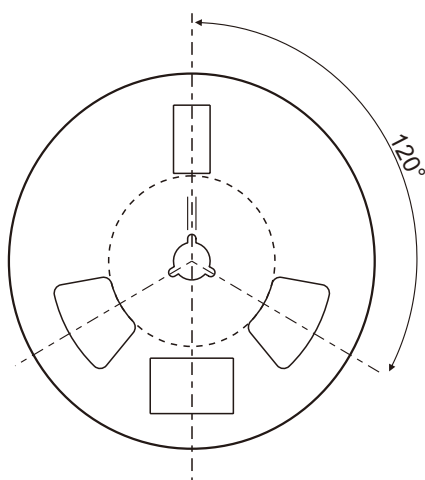
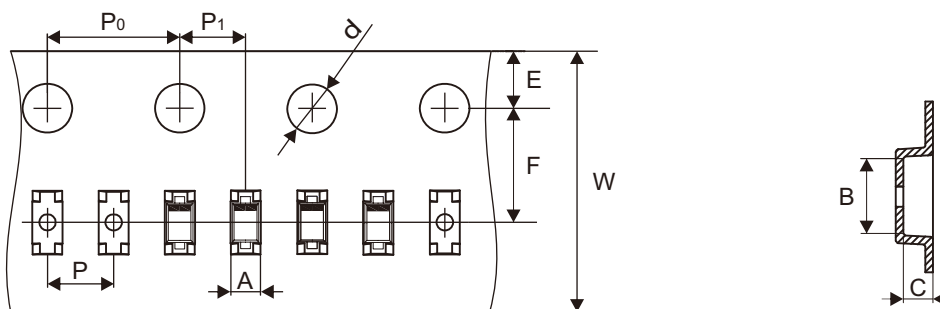


Fig.4 - Power Derating Curve



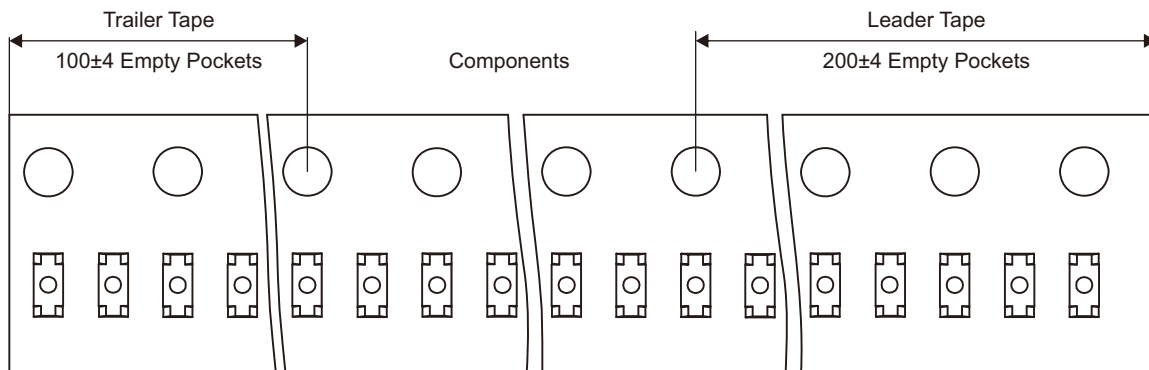
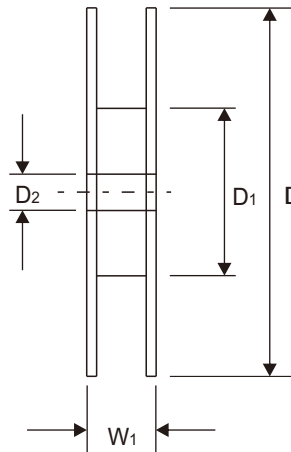
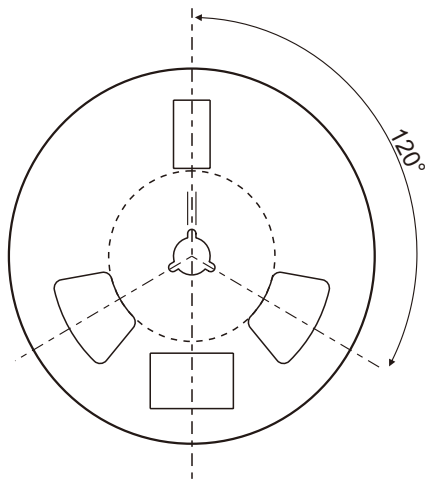
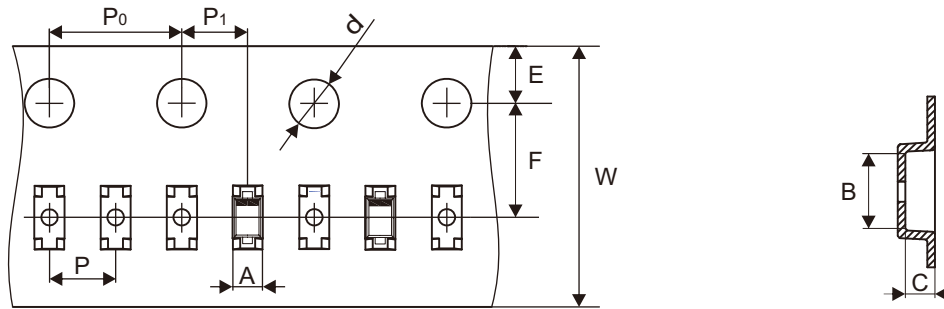
Reel Taping Specification (For 1SS400-F-HF)



SOD-523	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.90 ± 0.05	1.94 ± 0.05	0.73 ± 0.05	1.50 ± 0.10	178 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.035 ± 0.002	0.076 ± 0.002	0.029 ± 0.002	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOD-523	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	2.00 ± 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	0.079 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.315 + 0.012 / - 0.004	0.484 ± 0.039

Reel Taping Specification (For 1SS400-H-HF)



SOD-523	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.90 ± 0.05	1.94 ± 0.05	0.73 ± 0.05	1.50 ± 0.10	178 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.035 ± 0.002	0.076 ± 0.002	0.029 ± 0.002	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOD-523	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	2.00 ± 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	0.079 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.315 + 0.012 / - 0.004	0.484 ± 0.039

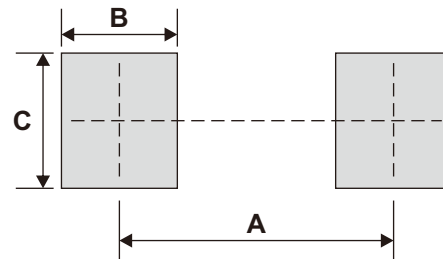
Marking Code

Part Number	Marking Code
1SS400-F-HF	A
1SS400-H-HF	



Suggested P.C.B. PAD Layout

SIZE	SOD-523	
	(mm)	(inch)
A	1.42	0.056
B	0.60	0.024
C	0.70	0.028



Note: 1. The pad layout is for reference purposes only.

Standard Packaging

Case Type		REEL PACK	
		REEL (pcs)	Reel Size (inch)
SOD-523	1SS400-F-HF	8,000	7
	1SS400-H-HF	3,000	