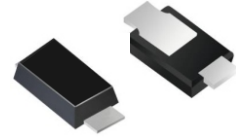


SS110LHE-HF

RoHS Device
Halogen Free

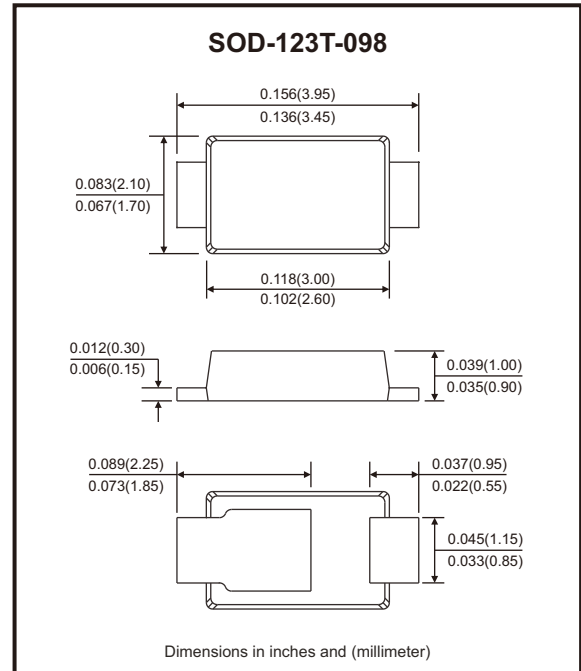


Features

- Metal silicon junction, majority carrier conduction.
- High forward surge current capability.
- Low forward voltage drop.
- High temperature soldering guaranteed: 260°C@10s.
- Robust guarding for over voltage protection.

Mechanical data

- Case: SOD-123T-098 molded plastic.
- Molding compound: UL flammability classification rating 94V-0.
- Terminals: Matte tin plated leads; solderable per J-STD-002 and JESD22-B102.
- Polarity: Color band denotes cathode end.



Circuit Diagram



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

Parameter	Symbol	SS110LHE-HF	Units
Peak repetitive reverse voltage	V _{RRM}	100	V
RMS reverse voltage	V _{RMS}	70	V
DC blocking voltage	V _{DC}	100	V
Average forward output current	I _{F(AV)}	1.0	A
Peak forward surge current, 8.3ms single half sine wave	I _{FSM}	30	A
Typical thermal resistance (Note 1)	R _{θJA}	110	°C/W
	R _{θJL}	15	
Operating junction temperature range	T _J	-55 to +150	°C
Storage temperature range	T _{STG}	-55 to +150	°C

Notes: 1. Device mounted on p.c.b. with 10mm x 20mm x 0.1mm copper pad area.

Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Units
Instantaneous forward voltage (Note 1)	$I_F = 1\text{A} @ T_A = 25^\circ\text{C}$	V_F			0.80	V
Reverse voltage (Note 2)	Rated $V_R @ T_J = 25^\circ\text{C}$	I_R			30	μA
	Rated $V_R @ T_J = 100^\circ\text{C}$	I_R			5	mA

Notes: 1. Pulse test: 300 μs pulse width, 1% duty cycle.
 2. Pulse test: pulse width 40ms.

Rating and Characteristic Curves (SS110LHE-HF)

Fig.1 - Forward Current Derating Curve

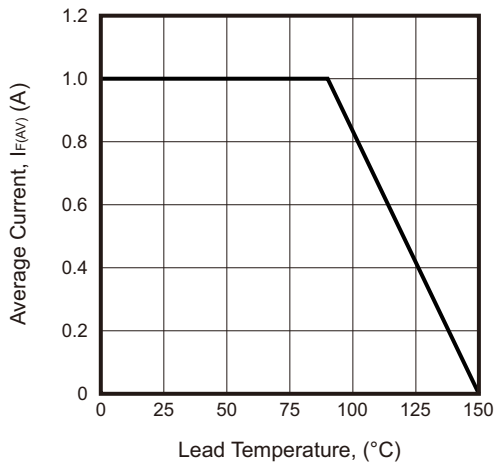


Fig.2 - Surge Current Derating Curve

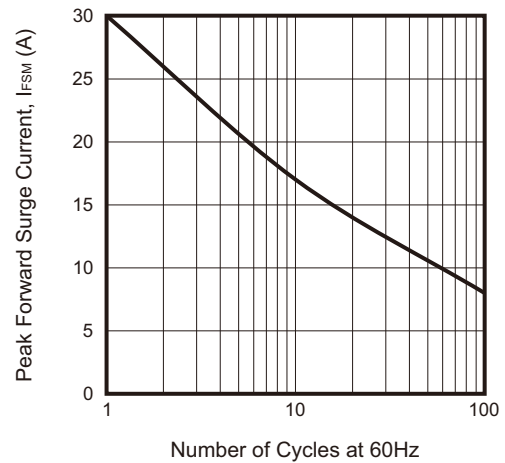


Fig.3 - Typical Forward Voltage Characteristics

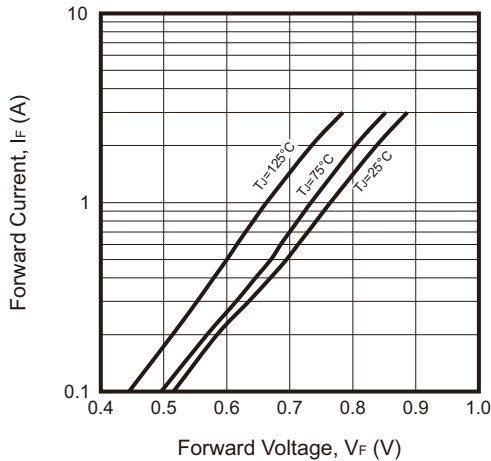
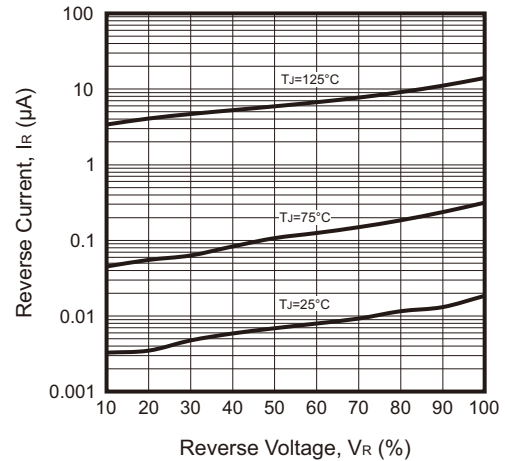
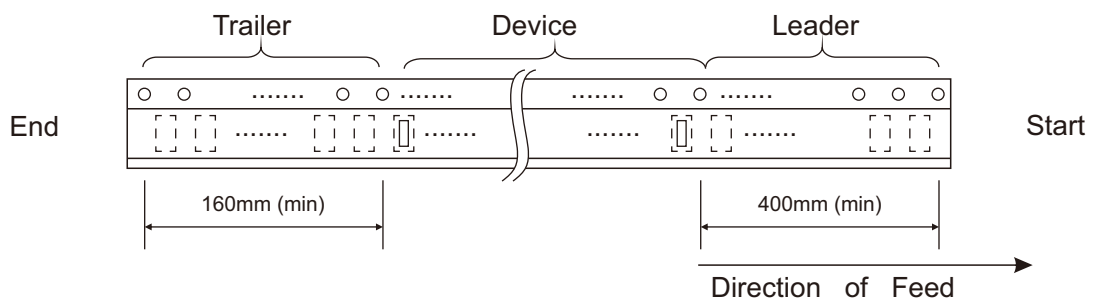
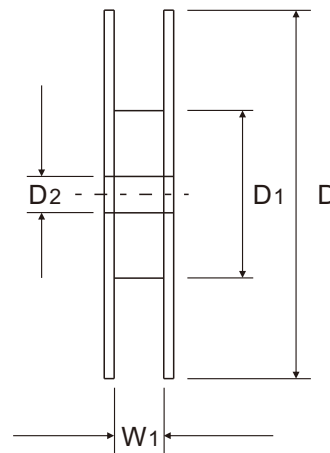
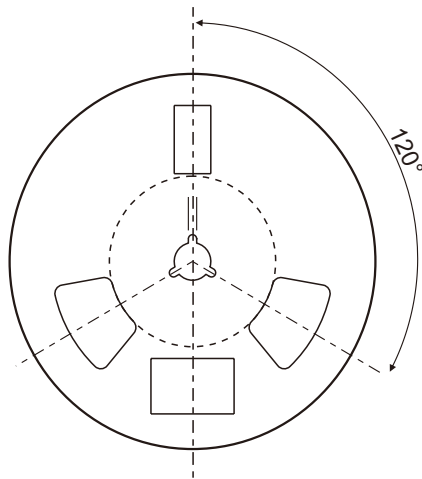
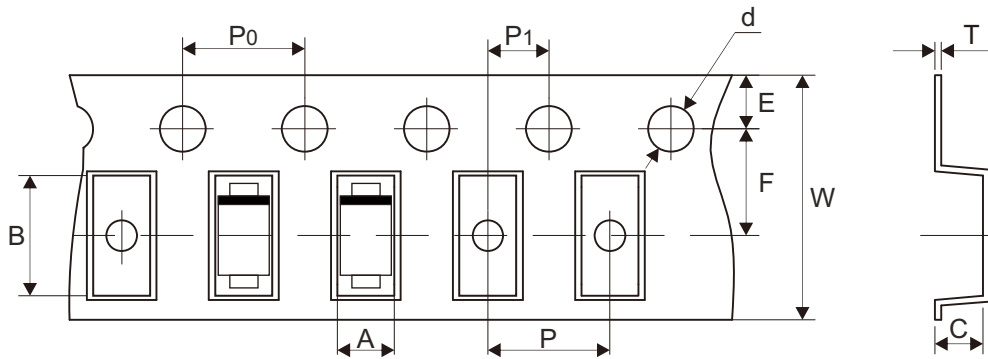


Fig.4 - Typical Reverse Characteristics



Reel Taping Specification

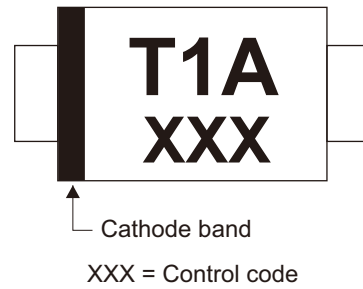


SOD-123T-098	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.00 ± 0.10	3.95 ± 0.10	1.23 ± 0.05	1.55 ± 0.10	330.00 ± 1.00	75.00 ± 1.00	13.50 ± 0.50
	(inch)	0.079 ± 0.004	0.156 ± 0.004	0.048 ± 0.002	0.061 ± 0.004	12.992 ± 0.039	2.953 ± 0.039	0.531 ± 0.020

SOD-123T-098	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.25 ± 0.05	8.00 ± 0.10	9.00 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.010 ± 0.002	0.315 ± 0.004	0.354 ± 0.039

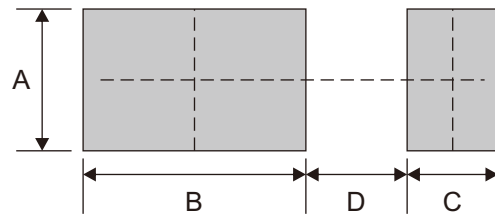
Marking Code

Part Number	Marking Code
SS110LHE-HF	T1A



Suggested P.C.B. PAD Layout

SIZE	SOD-123T-098	
	(mm)	(inch)
A	1.40	0.055
B	2.20	0.087
C	0.90	0.035
D	1.00	0.039



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-123T-098	10,000	13