

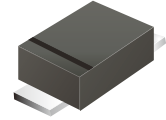
SS34WF-HF Thru. SS320WF-HF

Reverse Voltage: 40 to 200 Volts

Forward Current: 3 Amp

RoHS Device

Halogen Free



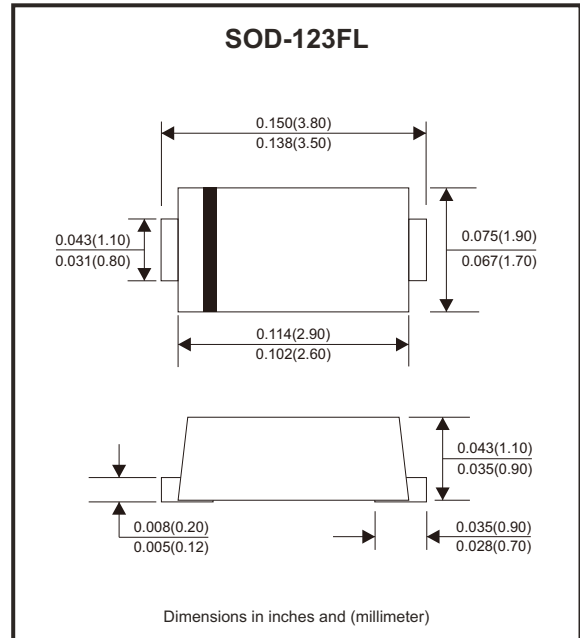
Features

- Metal silicon junction, majority carrier conduction.
- For surface mounted applications.
- Low power loss, high efficiency.
- High forward surge current capability.
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

Mechanical data

- Case: SOD-123FL.
- Terminals: Solderable per MIL-STD-750, method 2026.

Circuit Diagram



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20%

Parameter	Symbols	SS34WF-HF	SS36WF-HF	SS310WF-HF	SS315WF-HF	SS320WF-HF	Units
Maximum repetitive peak reverse voltage	V_{RRM}	40	60	100	150	200	V
Maximum RMS voltage	V_{RMS}	28	42	70	105	140	V
Maximum DC blocking voltage	V_{DC}	40	60	100	150	200	V
Maximum average forward rectified current	$I_{F(AV)}$	3					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80					A
Max instantaneous forward voltage at 3A	V_F	0.55	0.70	0.85	0.95		V
Maximum DC reverse current at rated DC reverse voltage	I_R	$T_A = 25^\circ C$ 0.5 $T_A = 100^\circ C$ 10	0.3 5				mA
Typical junction capacitance (Note 1)	C_j	250	160				pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	80					°C/W
Operating junction temperature range	T_j	-55 ~ +150					°C
Storage temperature range	T_{stg}	-55 ~ +150					°C

Notes: 1. Measured at 1 MHz and applied reverse voltage of 4V D.C.

2. P.C.B. mounted with 2.0" x 2.0" (5 x 5 cm) copper pad areas.

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REV:A

Rating and Characteristic Curves (SS34WF-HF Thru. SS320WF-HF)

Fig.1 - Forward Current Derating Curve

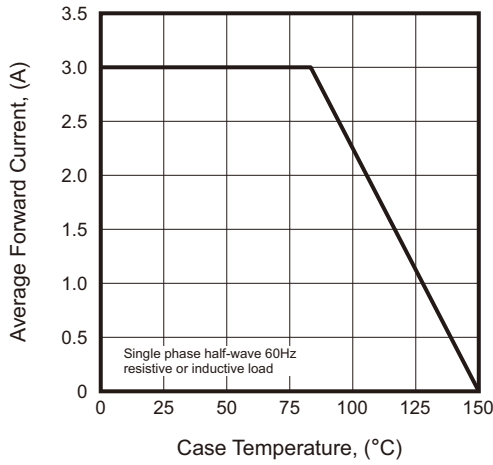


Fig.2 - Typical Reverse Characteristics

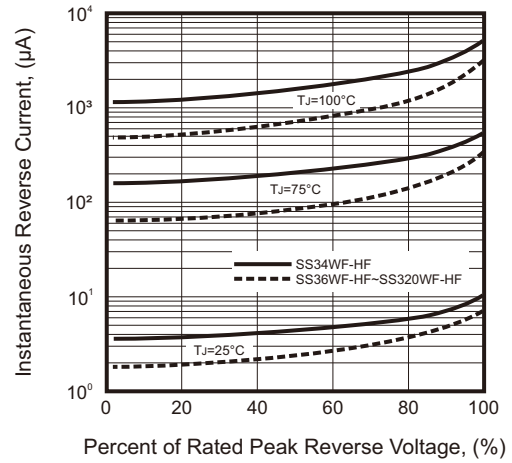


Fig.3 - Typical Forward Characteristic

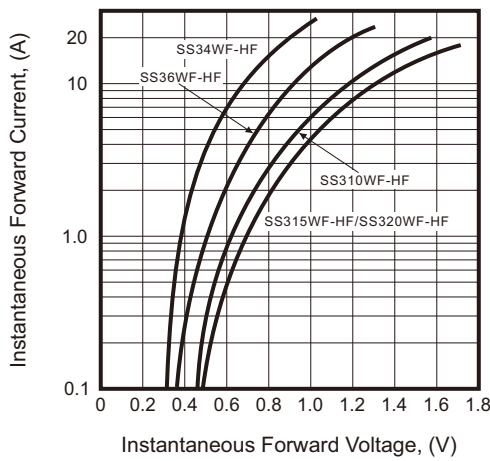


Fig.4 - Typical Junction Capacitance

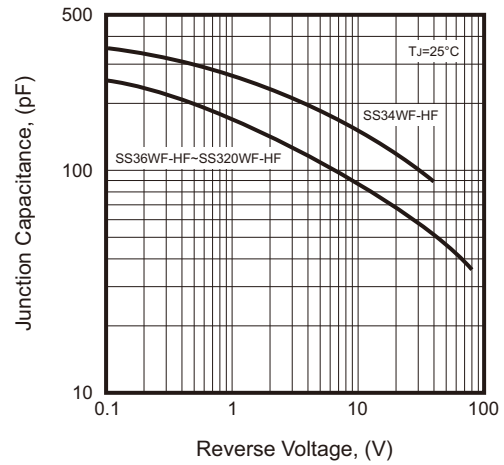


Fig.5 - Maximum Non-Repetitive Peak Forward Surge Current

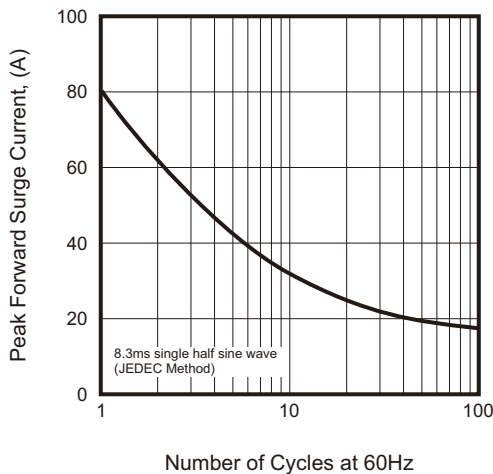
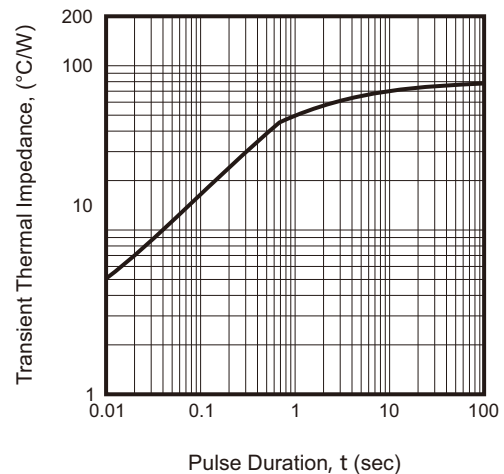
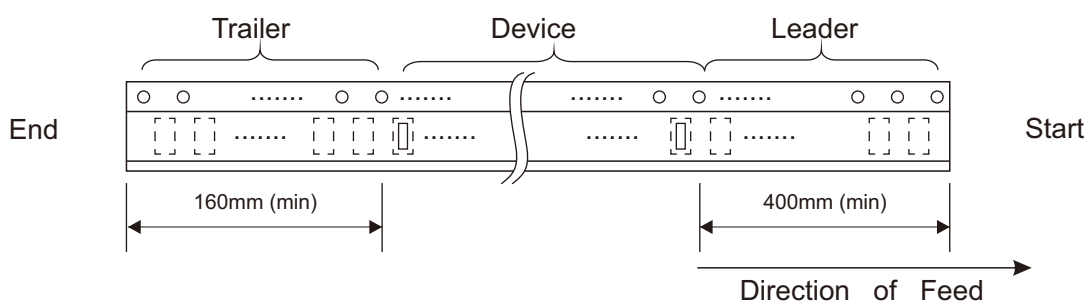
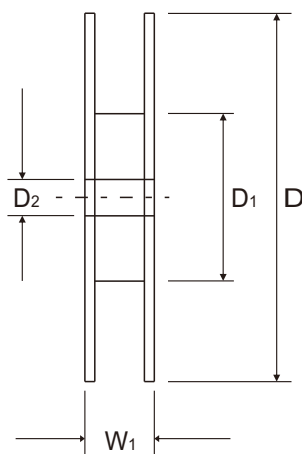
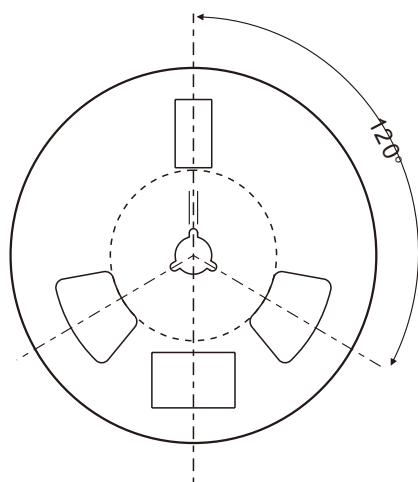
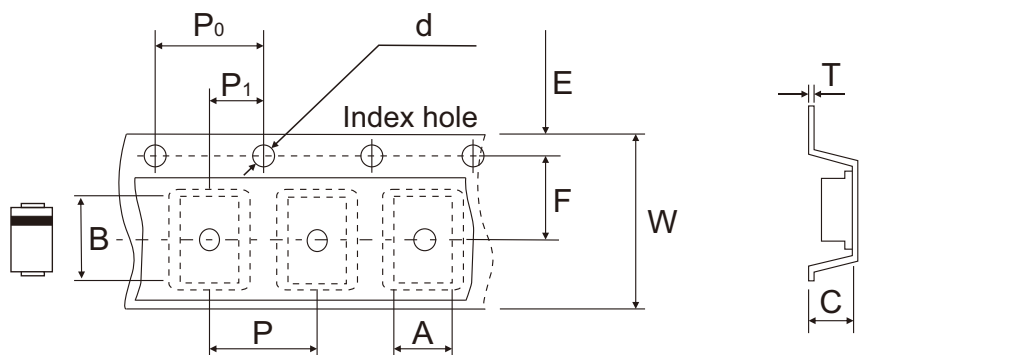


Fig.6 - Typical Transient Thermal Impedance



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Reel Taping Specification



SOD-123FL	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.05 ± 0.10	3.90 ± 0.10	1.28 ± 0.05	1.55 ± 0.05	180 ± 1.00	60.00 ± 1.50	13.00 ± 0.20
	(inch)	0.081 ± 0.004	0.154 ± 0.004	0.050 ± 0.002	0.061 ± 0.002	7.087 ± 0.039	2.362 ± 0.059	0.512 ± 0.008

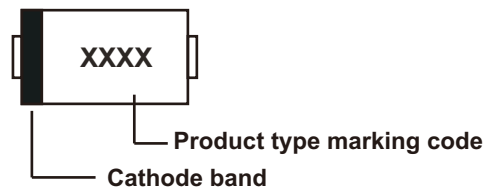
SOD-123FL	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.25 ± 0.02	8.00 ± 0.30	10.70 + 2.00 - 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.010 ± 0.001	0.315 ± 0.012	0.421 + 0.079 - 0.039

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REV:A

Marking Code

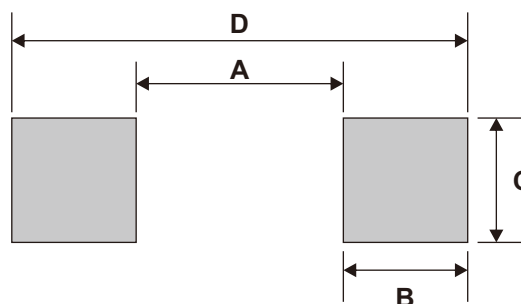
Part Number	Marking Code
SS34WF-HF	S34
SS36WF-HF	S36
SS310WF-HF	S310
SS315WF-HF	S315
SS320WF-HF	S320



xxx/xxxx = Product type marking code

Suggested P.C.B. PAD Layout

SIZE	SOD-123FL	
	(mm)	(inch)
A	2.00	0.079
B	1.20	0.047
C	1.20	0.047
D	4.40	0.173



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

Standard Packaging

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