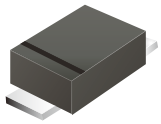
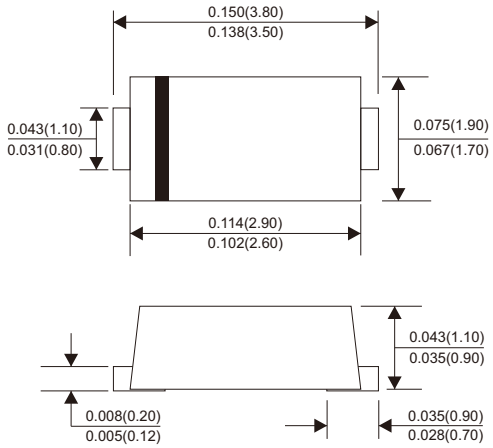
RS2AWF-HF Thru. RS2MWF-HF

Reverse Voltage: 50 to 1000 Volts
Forward Current: 2 Amp
RoHS Device
Halogen Free



SOD-123FL



Dimensions in inches and (millimeter)

Features

- For surface mounted applications.
- Low profile package.
- Glass passivated chip junction.
- Easy to pick and place.
- Fast reverse recovery time.

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	RS2AWF -HF	RS2BWF -HF	RS2DWF -HF	RS2GWF -HF	RS2JWF -HF	RS2KWF -HF	RS2MWF -HF	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at T_C = 125°C	$I_{F(AV)}$	2							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50							A
Max. forward voltage at 2A	V_F	1.3							V
Maximum DC reverse current at rated DC blocking voltage T_a = 25°C T_a =125°C	I_R	5 100							μA
Typical junction capacitance at V_R = 4V, f = 1MHz	C_j	30							pF
Maximum reverse recovery time (Note 1)	t_{rr}	150				250	500		ns
Typical thermal resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JC}$	75 22							°C/W
Operating and storage temperature range	T_j, T_{stg}	-55 ~ +150							°C

Notes: 1. Measured with I_F = 0.5A, I_R = 1A, I_{rr} = 0.25A.
2. P.C.B. mounted with 2.0" x 2.0" (5 x 5 cm) copper pad areas.

Rating and Characteristic Curves (RS2AWF-HF Thru. RS2MWF-HF)

Fig.1 - Forward Current Derating Curve

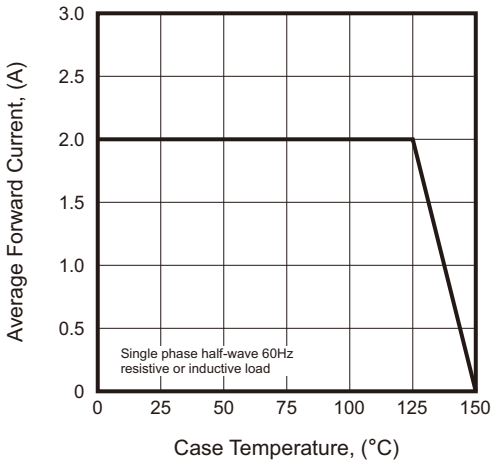


Fig.2 - Typical Reverse Characteristics

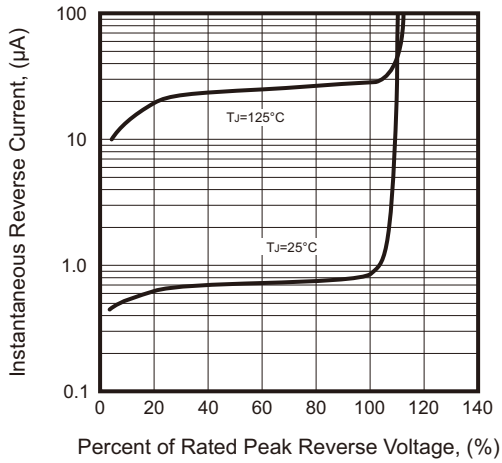


Fig.3 - Typical Instantaneous Forward Characteristic

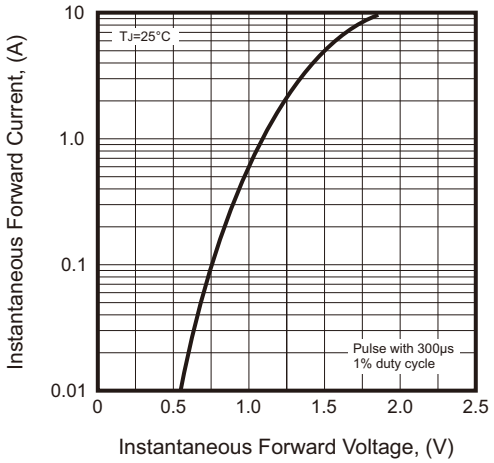


Fig.4 - Typical Junction Capacitance

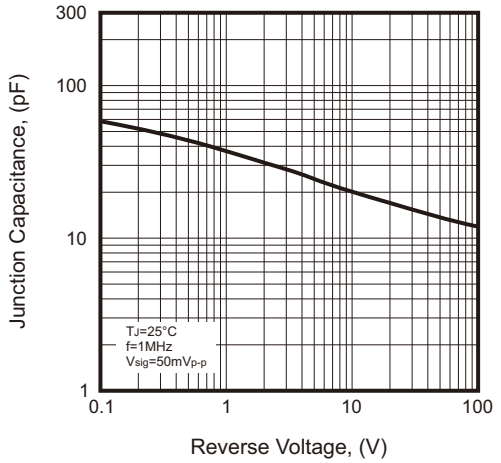
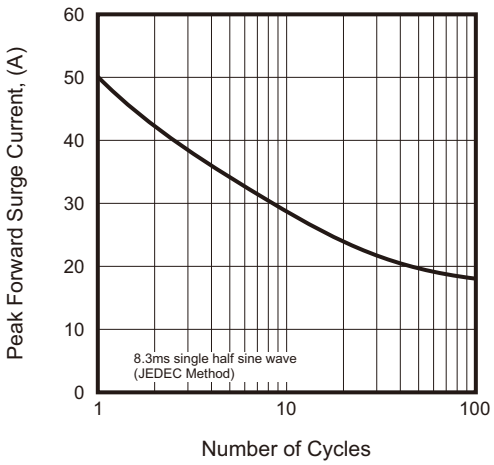
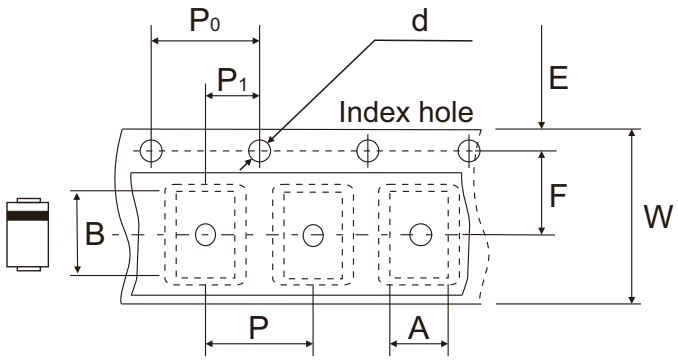
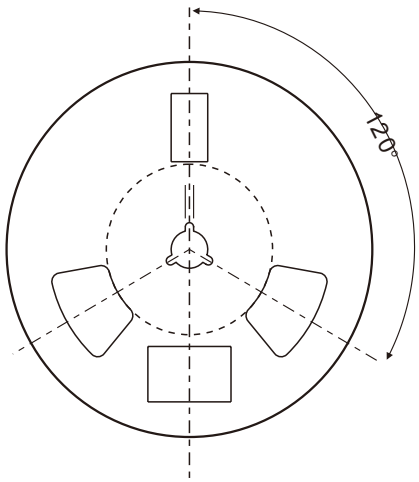


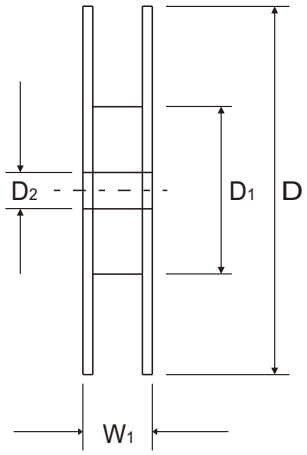
Fig.5 - Maximum Non-Repetitive Peak Forward Surge Current

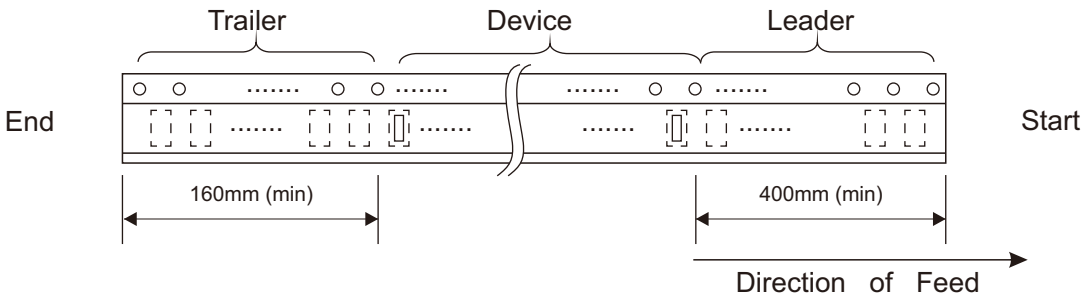


Reel Taping Specification







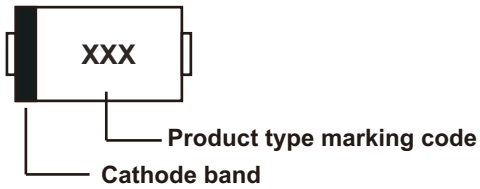


	SYMBOL	A	B	C	d	D	D1	D2
SOD-123FL	(mm)	2.05 ± 0.10	3.90 ± 0.10	1.28 ± 0.05	1.55 ± 0.05	180 ± 1.00	60.00 ± 1.50	13.00 ± 0.20
	(inch)	0.081 ± 0.004	0.154 ± 0.004	0.050 ± 0.002	0.061 ± 0.002	7.087 ± 0.039	2.362 ± 0.059	0.512 ± 0.008

	SYMBOL	E	F	P	P0	P1	T	W	W1
SOD-123FL	(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

Marking Code

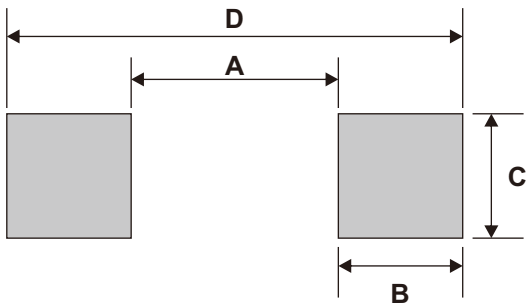
Part Number	Marking Code
RS2AWF-HF	2F2
RS2BWF-HF	
RS2DWF-HF	
RS2GWF-HF	
RS2JWF-HF	2F5
RS2KWF-HF	2F7
RS2MWF-HF	



xxx = Product type marking code

Suggested 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