

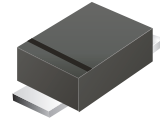
## ACDBMS1100-HF

Reverse Voltage: 100 Volts

Forward Current: 1.0 Amp

RoHS Device

Halogen Free

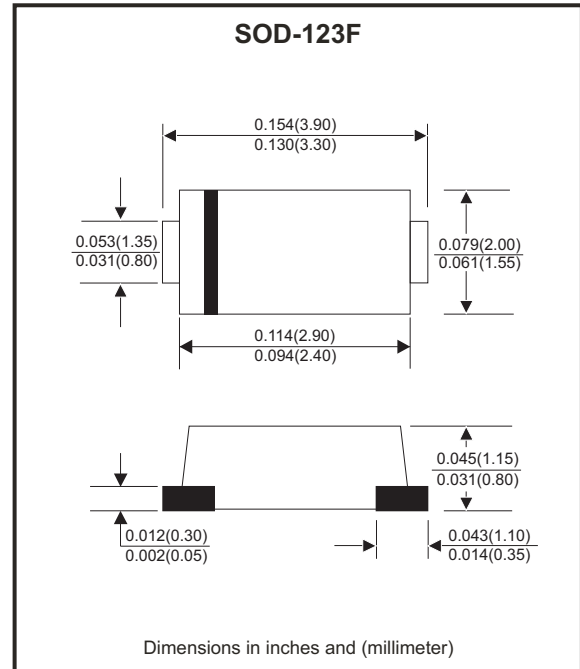


### Features

- High current capability.
- Extremely low thermal resistance.
- For surface mount application.
- Low forward voltage.
- Comply with AEC-Q101

### Mechanical data

- Epoxy: UL 94V-0 rated flame retardant.
- Case: SOD-123F, molded plastic.
- Terminals: Lead Free Plating (Tin Finish)  
Solderable per MIL-STD-202, method 208.
- Polarity: Indicated by cathode band.
- Weight: 0.022 grams (Approx.)



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

Parameter	Symbol	ACDBMS1100-HF	Unit
Max. Repetitive peak reverse voltage	V <sub>RRM</sub>	100	V
Max. RMS voltage	V <sub>RMS</sub>	70	V
Max. DC blocking voltage	V <sub>DC</sub>	100	V
Max. Average forward rectified current	I <sub>F</sub>	1.0	A
Max. Instantaneous forward voltage I <sub>F</sub> =1.0A @T <sub>A</sub> =25°C	V <sub>F</sub>	0.83	V
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC methode)	I <sub>FSM</sub>	30	A
Max. DC reverse current @T <sub>A</sub> =25°C at Rated DC blocking voltage @T <sub>A</sub> =100°C	I <sub>R</sub>	0.5 20	mA
Typical junction capacitance (Note 1)	C <sub>J</sub>	25	pF
Typical thermal resistance	R <sub>θJC</sub>	45	°C/W
Operating temperature range	T <sub>J</sub>	-50 to +150	°C
Storage temperature range	T <sub>STG</sub>	-55 to +150	°C

Note: 1. Measured at 1.0MHZ and applied reverse voltage of 4V DC.

Company reserves the right to improve product design , functions and reliability without notice.

## Rating and Characteristic Curves (ACDBMS1100-HF)

Fig.1 - Typical Forward Current Derating Curve

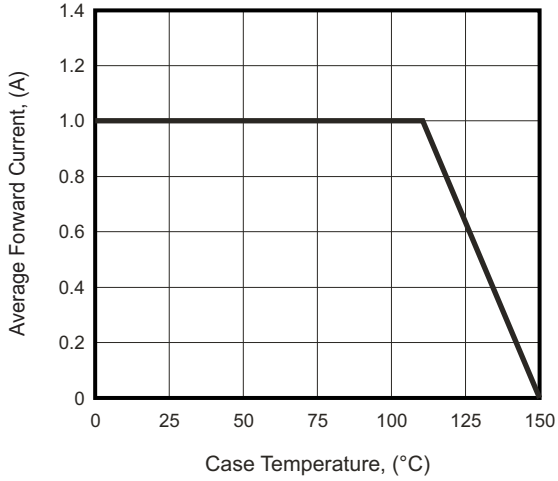


Fig.2 - Typical Forward Characteristics

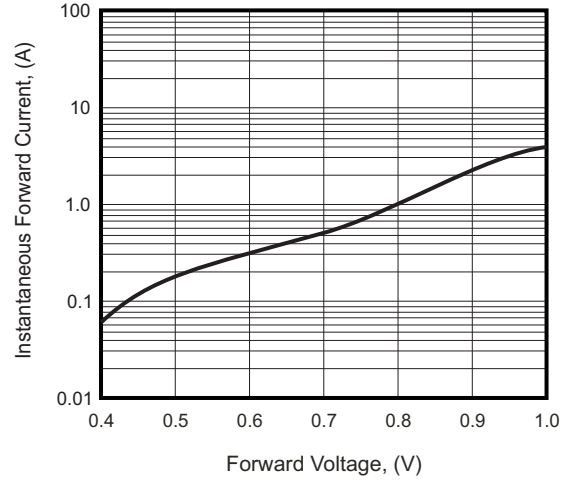


Fig.3 - Maximum Non-repetitive Forward Surge Current

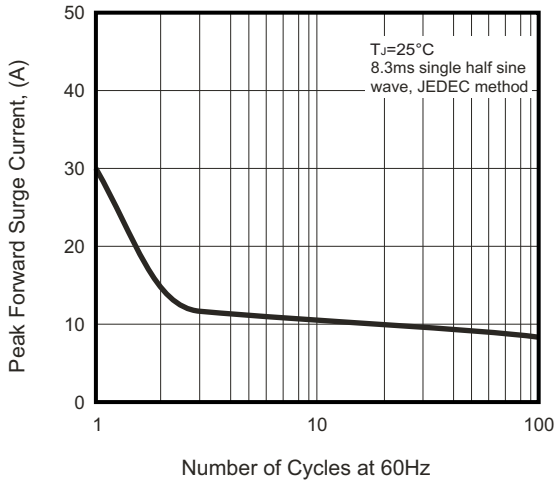


Fig.4 - Typical Reverse Characteristics

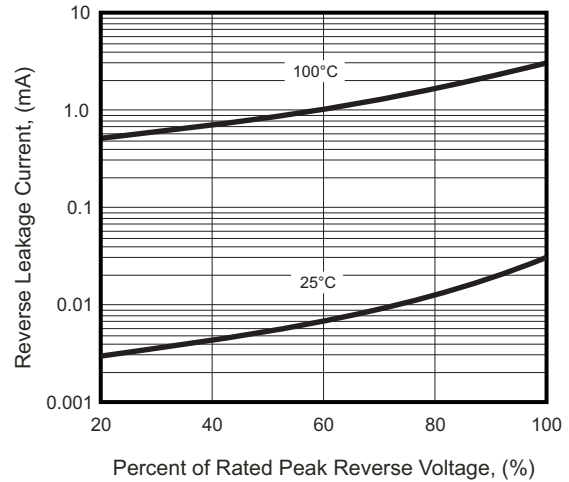
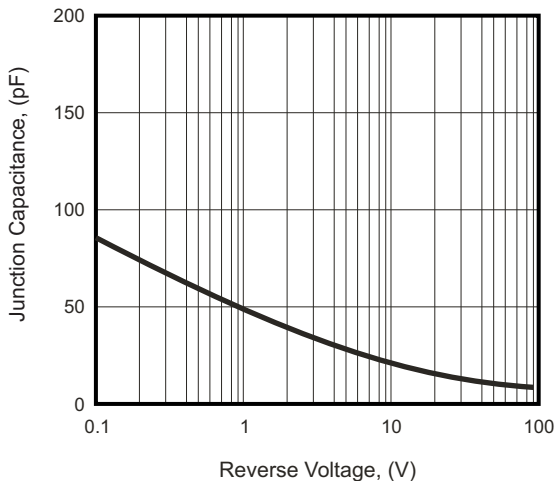
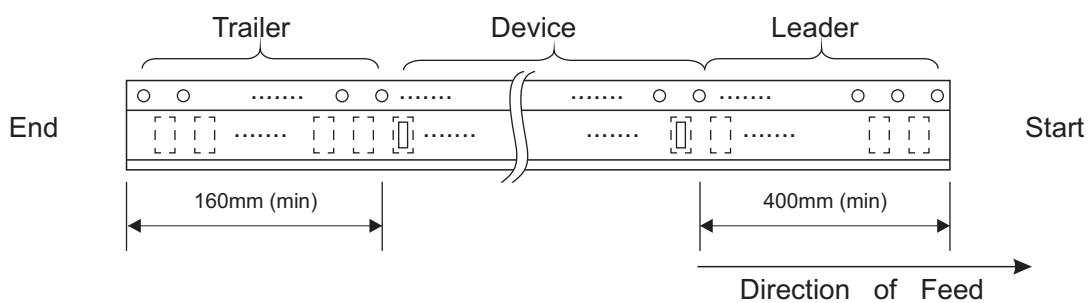
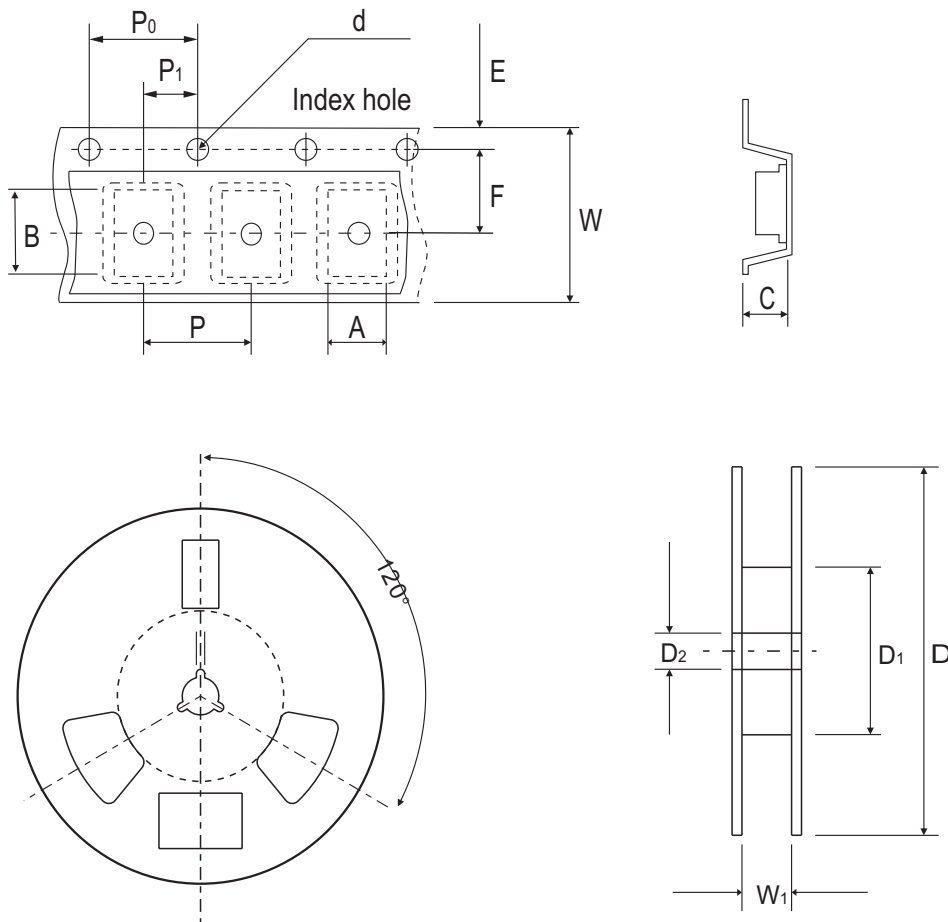


Fig.5 - Typical Junction Capacitance



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## Reel Taping Specification



SOD-123F	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.00 ± 0.10	5.60 ± 0.10	1.20 ± 0.10	1.50 ± 0.10	330 ± 2.00	50.00 Min.	13.50 ± 1.00
	(inch)	0.118 ± 0.004	0.220 ± 0.004	0.047 ± 0.004	0.059 ± 0.004	13.00 ± 0.079	1.969 Min.	0.531 ± 0.039

SOD-123F	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	5.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.05	2.00 ± 0.05	12.00 ± 0.20	18.40 Max.
	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.158 ± 0.004	0.158 ± 0.002	0.079 ± 0.002	0.472 ± 0.008	0.724 Max.

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REV: A

## Marking Code

Part Number	Marking Code
ACDBMS1100-HF	CA.

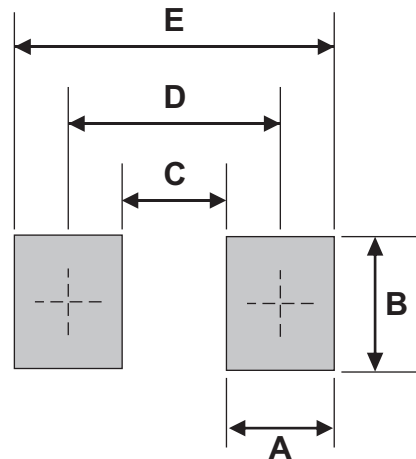


**XX = Product type marking code**

**“ . ” = Halogen Free**

## Suggested PAD Layout

SIZE	SOD-123F	
	(mm)	(inch)
A	1.34	0.053
B	1.80	0.071
C	1.52	0.060
D	2.86	0.113
E	4.20	0.165



Note:

1. The pad layout is for reference purposes only.

## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
SOD-123F	3,000	13