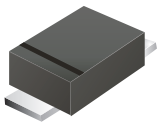
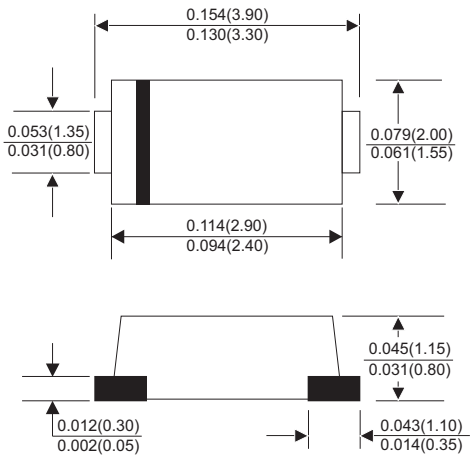
# ACDBMS1100-HF

## Reverse Voltage: 100 Volts
## Forward Current: 1.0 Amp
## RoHS Device
## Halogen Free



SOD-123F




Dimensions in inches and (millimeter)

## 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 $T_A$=25°C unless otherwise noted)

| Parameter | Symbol | ACDBMS1100-HF | Unit |
|---|---|---|---|
| Max. Repetitive peak reverse voltage | $V_{RRM}$ | 100 | V |
| Max. RMS voltage | $V_{RMS}$ | 70 | V |
| Max. DC blocking voltage | $V_{DC}$ | 100 | V |
| Max. Average forward rectified current | $I_F$ | 1.0 | A |
| Max. Instantaneous forward voltage<br>$I_F$=1.0A @$T_A$=25°C | $V_F$ | 0.83 | V |
| Peak forward surge current, 8.3ms<br>single half sine-wave superimposed<br>on rated load (JEDEC methode) | $I_{FSM}$ | 30 | A |
| Max. DC reverse current @$T_A$=25°C<br>at Rated DC blocking voltage @$T_A$=100°C | $I_R$ | 0.5<br>20 | mA |
| Typical junction capacitance (Note 1) | $C_J$ | 25 | pF |
| Typical thermal resistance | $R_{\theta JC}$ | 45 | °C/W |
| Operating temperature range | $T_J$ | -50 to +150 | °C |
| Storage temperature range | $T_{STG}$ | -55 to +150 | °C |

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

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## Rating and Characteristic Curves (ACDBMS1100-HF)

Fig.1 - Typical Forward Current Derating Curve

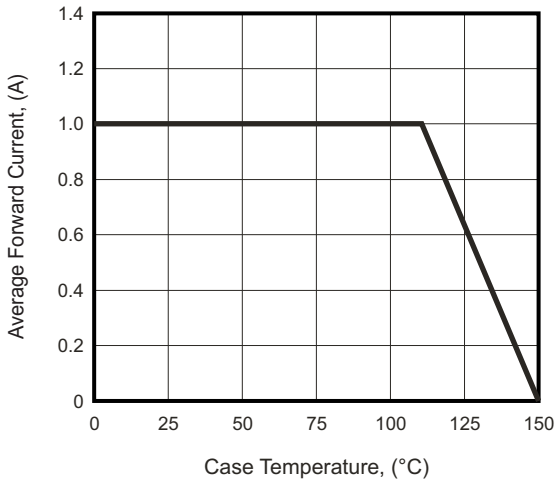



Fig.2 - Typical Forward Characteristics

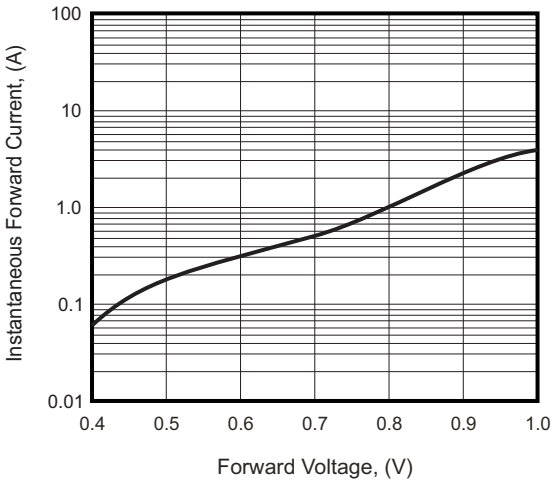



Fig.3 - Maximum Non-repetitive Forward Surge Current

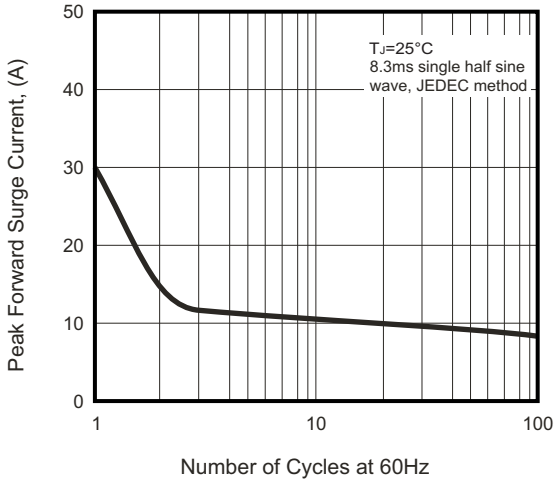



Fig.4 - Typical Reverse Characteristics

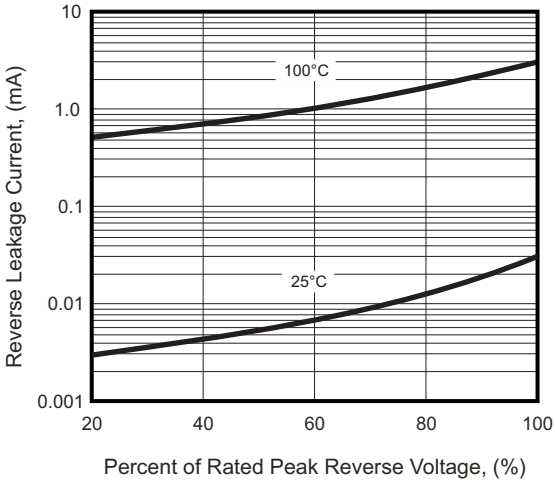
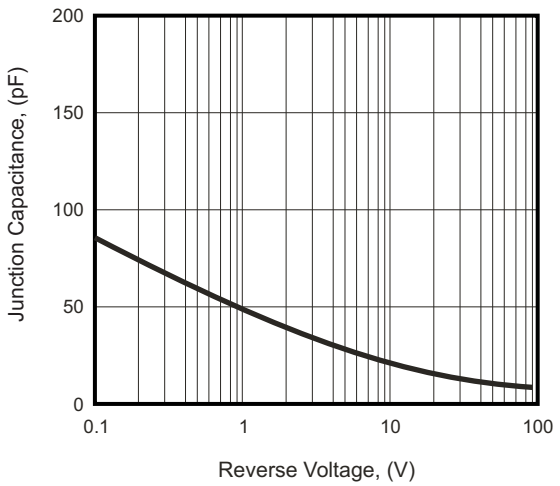



Fig.5 - Typical Junction Capacitance

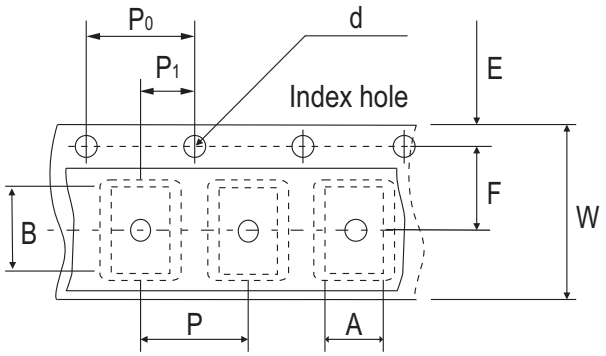


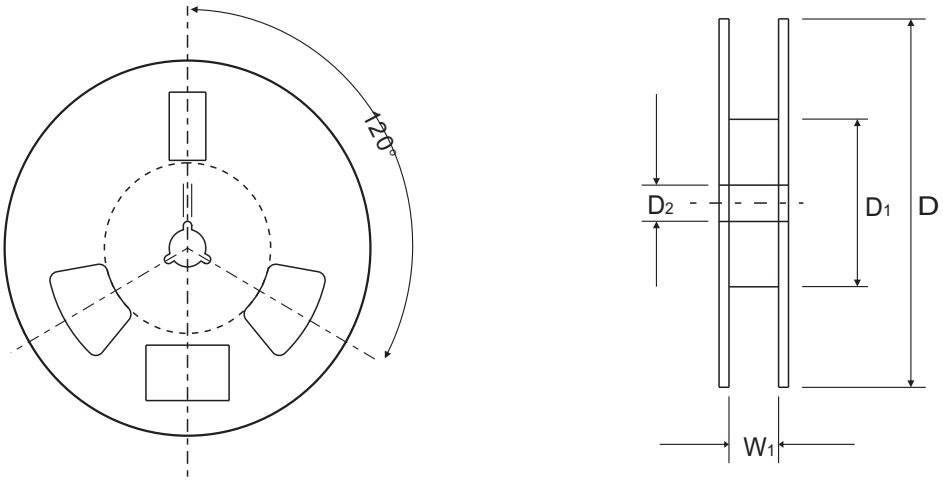

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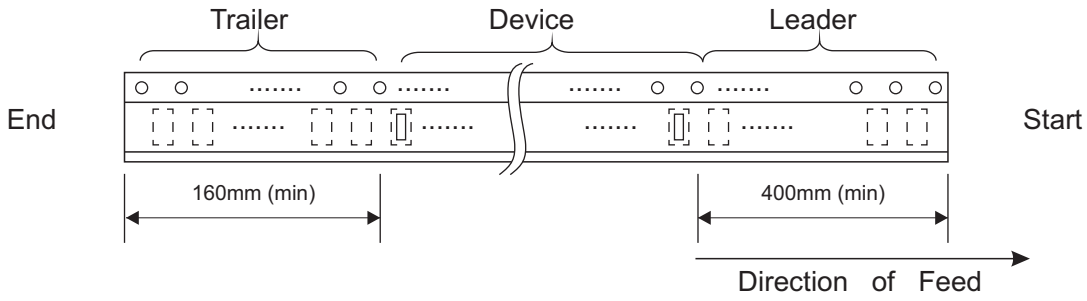


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# Reel Taping Specification




| | SYMBOL | A | B | C | d | D | D1 | D2 |
|---|---|---|---|---|---|---|---|---|
| SOD-123F | (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 |

| | SYMBOL | E | F | P | P0 | P1 | W | W1 |
|---|---|---|---|---|---|---|---|---|
| SOD-123F | (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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## Marking Code

| Part Number | Marking Code |
|---|---|
| ACDBMS1100-HF | CA. |

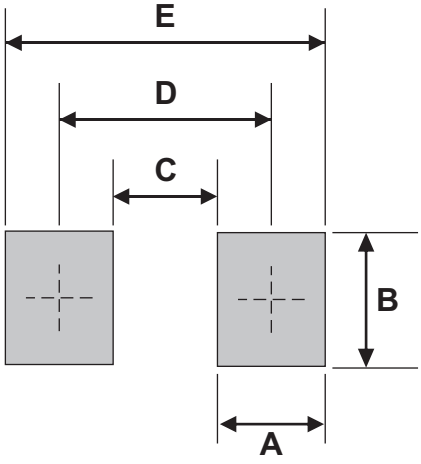



**XX = Product type marking code**

**“ ● ” = 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 |



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