

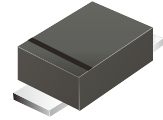
## ACDBMS240-HF Thru. ACDBMS2100-HF

Reverse Voltage: 40 to 100 Volts

Forward Current: 2.0 Amp

RoHS Device

Halogen Free

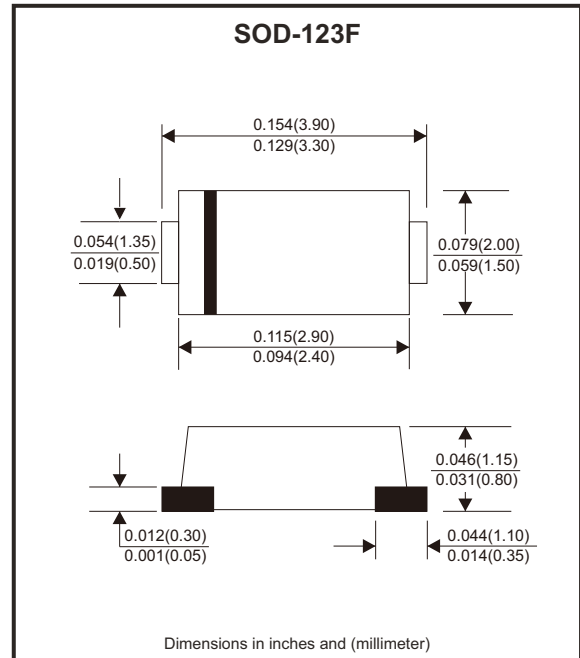


### Features

- Ideal for surface mount applications.
- Easy pick and place.
- Built-in strain relief.
- Fast switching speed.
- AEC-Q101 Qualified

### 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.).



### Circuit diagram



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

Parameter	Symbol	ACDBMS240-HF	ACDBMS260-HF	ACDBMS2100-HF	Unit
Max. Repetitive peak reverse voltage	$V_{RRM}$	40	60	100	V
Max. RMS voltage	$V_{RMS}$	28	42	70	V
Max. DC blocking voltage	$V_{DC}$	40	60	100	V
Max. Average forward rectified current	$I_F$	2			A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC methode)	$I_{FSM}$	40			A
Max. Instantaneous forward voltage $I_F=2A @ T_A=25^\circ C$	$V_F$	0.52	0.66	0.83	V
Max. DC reverse current @ $T_A=25^\circ C$ at Rated DC blocking voltage @ $T_A=100^\circ C$	$I_R$	0.5 30		0.2 15	mA
Typical junction capacitance (Note 1)	$C_J$	180	95	60	pF
Typical thermal resistance	$R_{\theta JC}$	35			°C/W
Operating temperature range	$T_J$	-55 to +125		-55 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.

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

## Rating and Characteristic Curves (ACDBMS240-HF Thru. ACDBMS2100-HF)

Fig.1 - Typical Forward Current Derating Curve

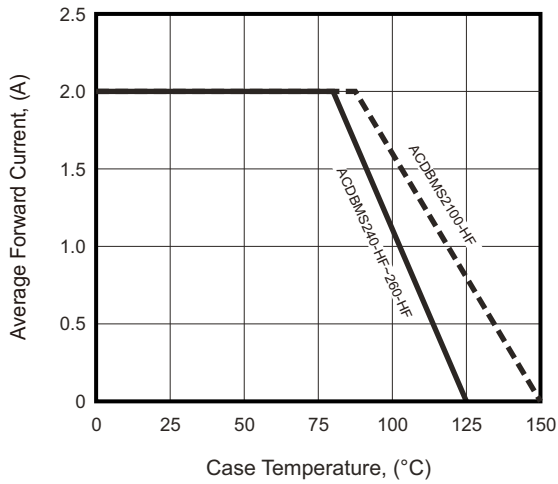


Fig.2 - Typical Forward Characteristics

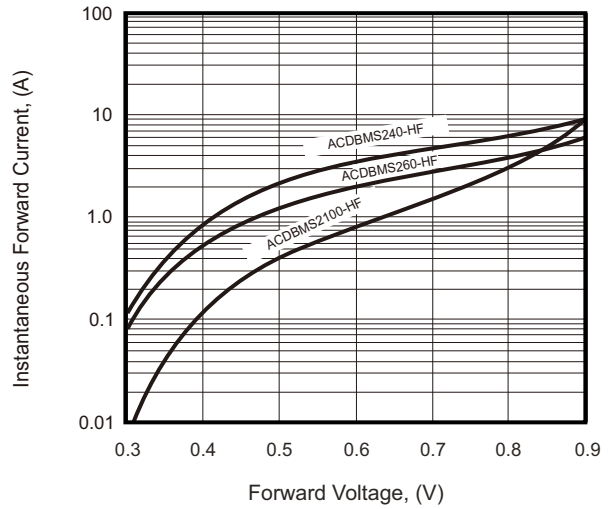


Fig.3 - Maximum Non-repetitive Forward Surge Current

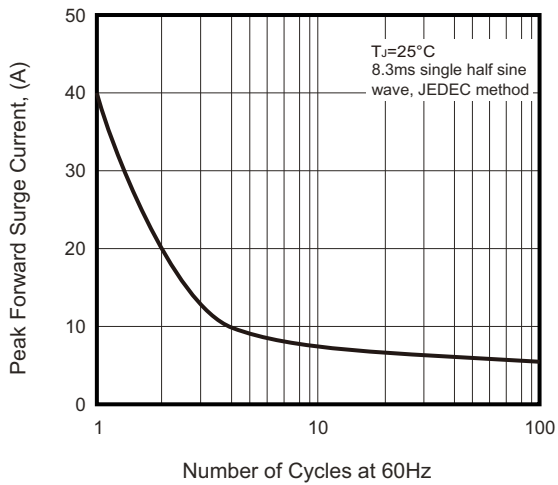


Fig.4 - Typical Reverse Characteristics

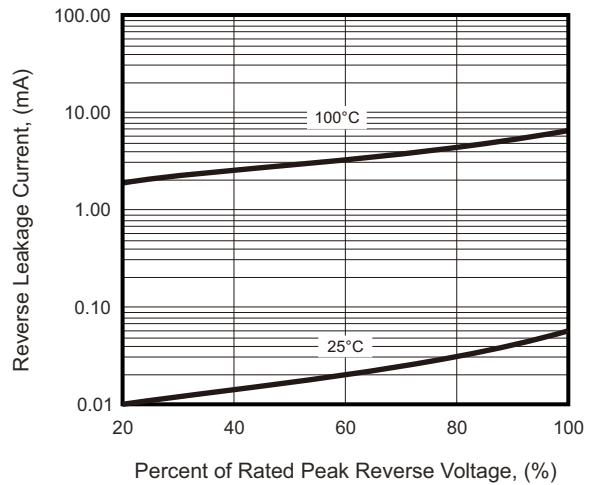
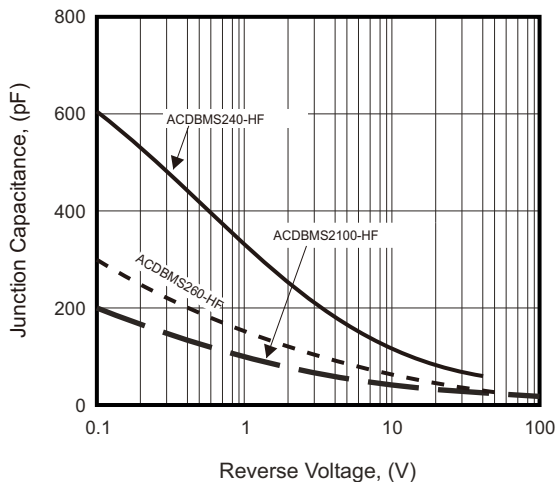
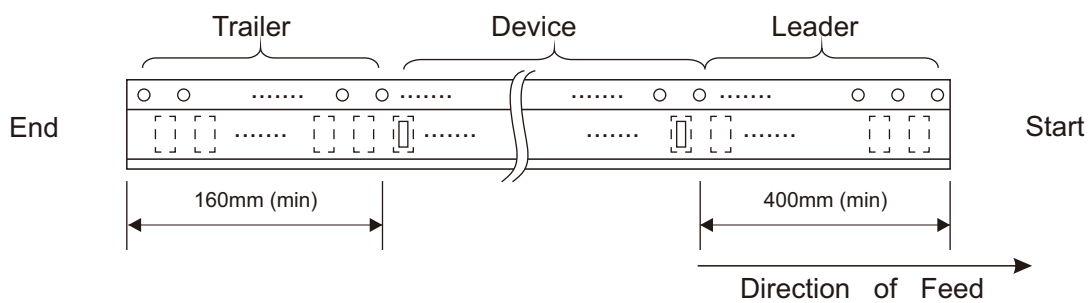
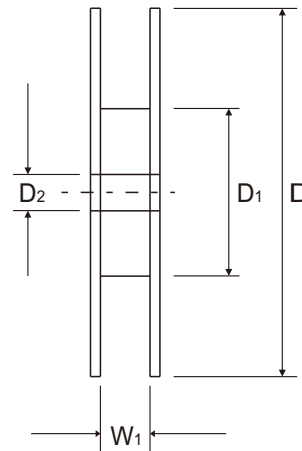
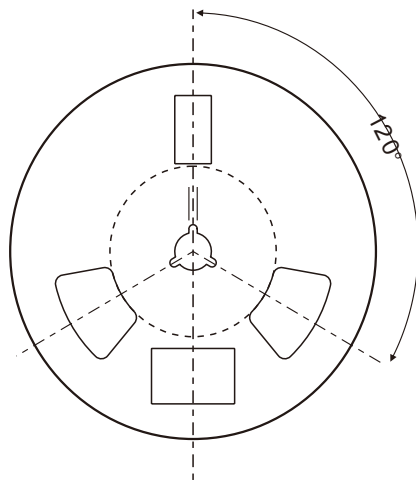
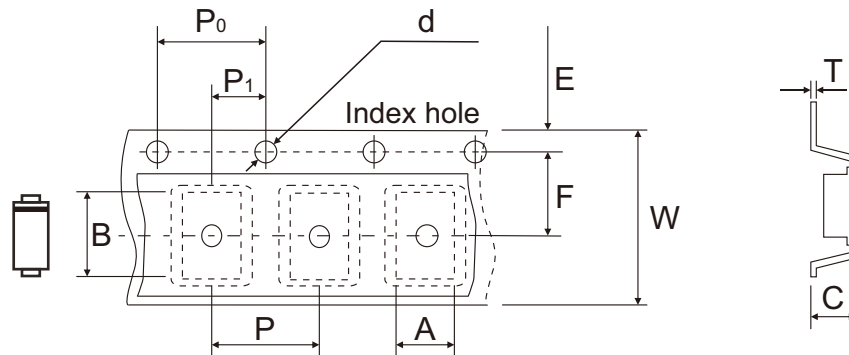


Fig.5 - Typical Junction Capacitance



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## Reel Taping Specification



SOD-123F	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.05 ± 0.10	4.01 ± 0.10	1.32 ± 0.10	2.00 ± 0.10	178 Max.	50 Min.	13.30 ± 1.00
	(inch)	0.081 ± 0.004	0.158 ± 0.004	0.052 ± 0.004	0.079 ± 0.004	7.008 Max.	1.969 Min.	0.524 ± 0.039

SOD-123F	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	0.24 ± 0.03	8.00 ± 0.30	9.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.009 ± 0.001	0.315 ± 0.012	0.366 ± 0.039

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REV:A

## Marking Code

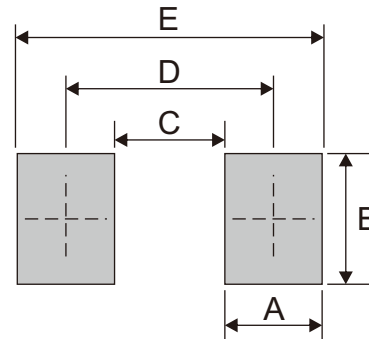
Part Number	Marking Code
ACDBMS240-HF	T4.
ACDBMS260-HF	T6.
ACDBMS2100-HF	TA.



**XX** = Product type marking code  
**“.”** = Halogen Free

## Suggested PAD Layout

SIZE	SOD-123F	
	(mm)	(inch)
<b>A</b>	<b>1.34</b>	<b>0.053</b>
<b>B</b>	<b>1.80</b>	<b>0.071</b>
<b>C</b>	<b>1.52</b>	<b>0.060</b>
<b>D</b>	<b>2.86</b>	<b>0.113</b>
<b>E</b>	<b>4.25</b>	<b>0.167</b>



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	7