

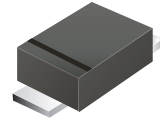
CDBMS120-HF Thru. CDBMS1200-HF

Reverse Voltage: 20 to 200 Volts

Forward Current: 1.0 Amp

RoHS Device

Halogen Free

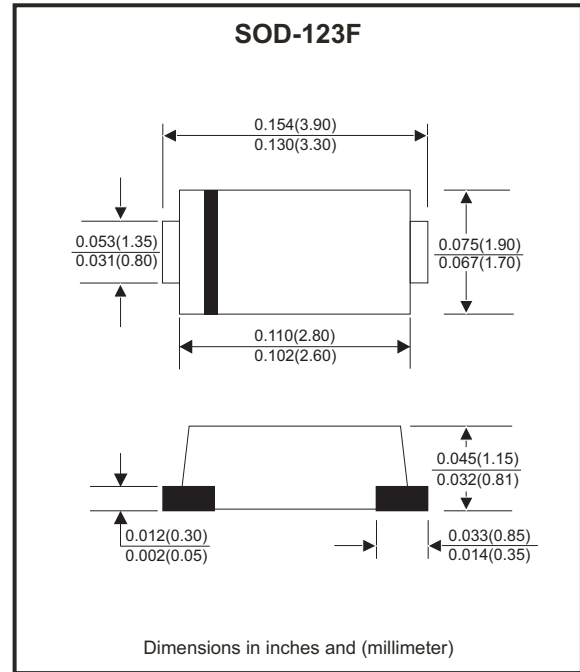


Features

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

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	CDBMS								Unit
		120-HF	130-HF	140-HF	160-HF	180-HF	1100-HF	1150-HF	1200-HF	
Max. Repetitive peak reverse voltage	V _{RRM}	20	30	40	60	80	100	150	200	V
Max. RMS voltage	V _{RMS}	14	21	28	42	56	70	105	140	V
Max. DC blocking voltage	V _{DC}	20	30	40	60	80	100	150	200	V
Max. Average forward rectified current	I _F	1.0								A
Max. Instantaneous forward voltage I _F =1.0A @TA=25°C	V _F	0.52		0.66	0.83	0.87	0.90			V
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC methode)	I _{FSM}	30								A
Max. DC reverse current @TA=25°C at Rated DC blocking voltage @TA=100°C	I _R	0.5				0.2				mA
		20				10				
Typical junction capacitance (Note 1)	C _J	60				25				pF
Typical thermal resistance	R _{θJC}	45								°C/W
Operating temperature range	T _J	-50 to +125				-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 (CDBMS120-HF Thru. CDBMS1200-HF)

Fig.1 - Typical Forward Current Derating Curve

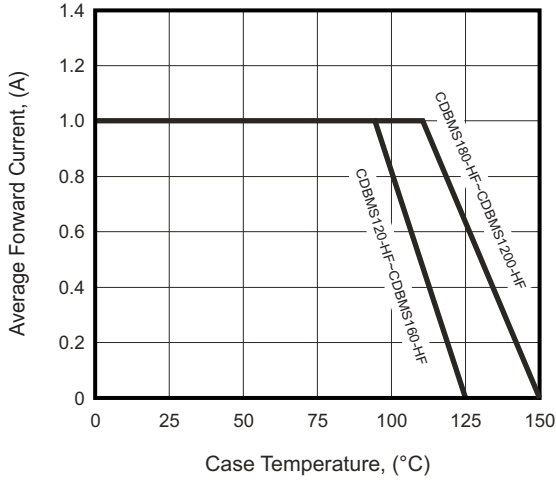


Fig.2 - Typical Forward Characteristics

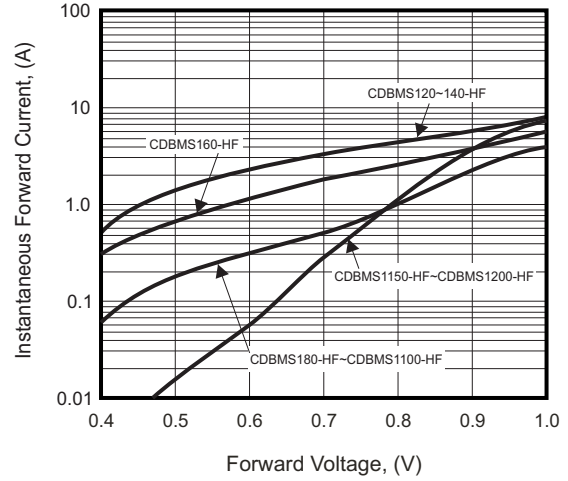


Fig.3 - Maximum Non-repetitive Forward Surge Current

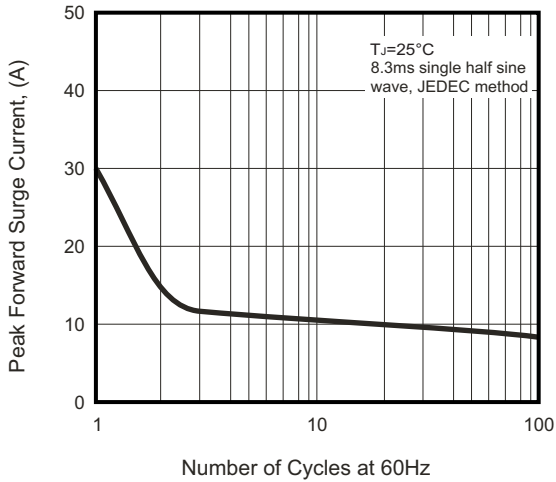


Fig.4 - Typical Reverse Characteristics

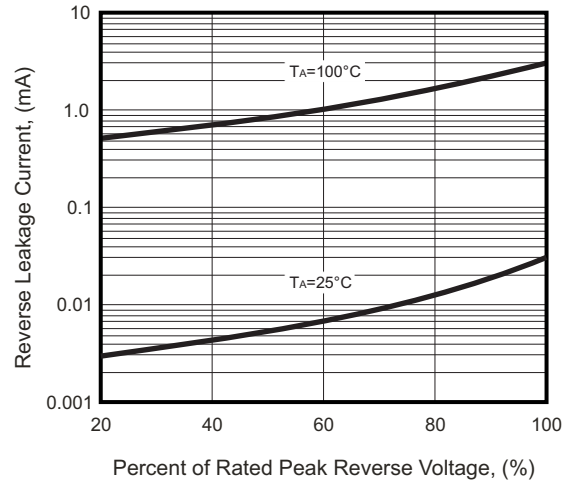
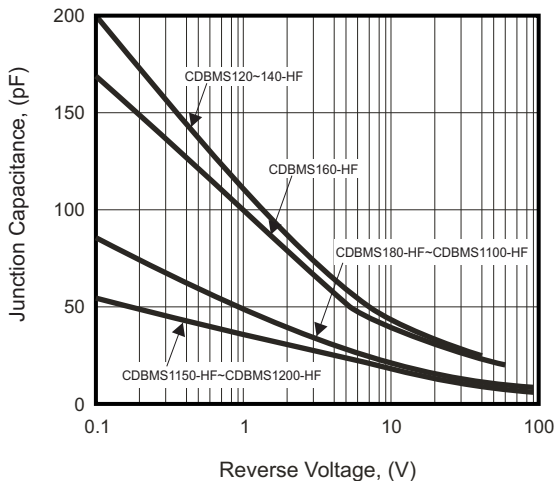
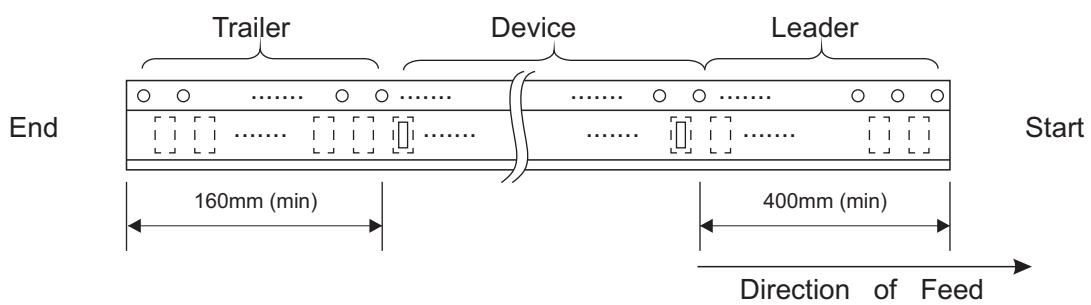
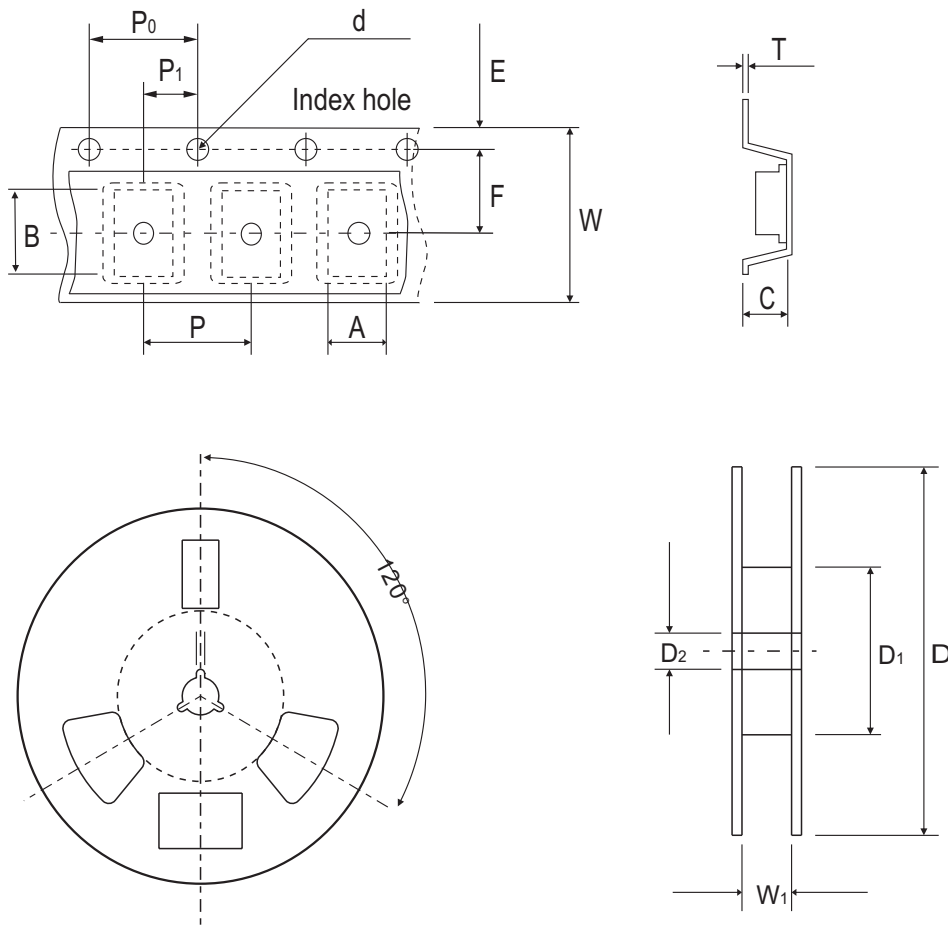


Fig.5 - Typical Junction Capacitance



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Reel Taping Specification



SOD-123F	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(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	P ₀	P ₁	W	W ₁
	(mm)	1.75 ± 0.10	3.50 ± 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	0.138 ± 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
CDBMS120-HF	C2.
CDBMS130-HF	C3.
CDBMS140-HF	C4.
CDBMS160-HF	C6.
CDBMS180-HF	C8.
CDBMS1100-HF	CA.
CDBMS1150-HF	CB.
CDBMS1200-HF	CC.

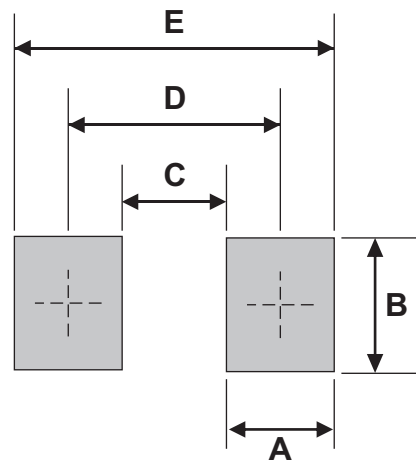


XXX = Product type marking code

“.” = 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	7

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