

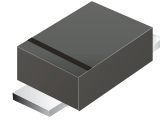
CDBMS220-HF Thru. CDBMS2100-HF

Reverse Voltage: 20 to 100 Volts

Forward Current: 2.0 Amp

RoHS Device

Halogen Free

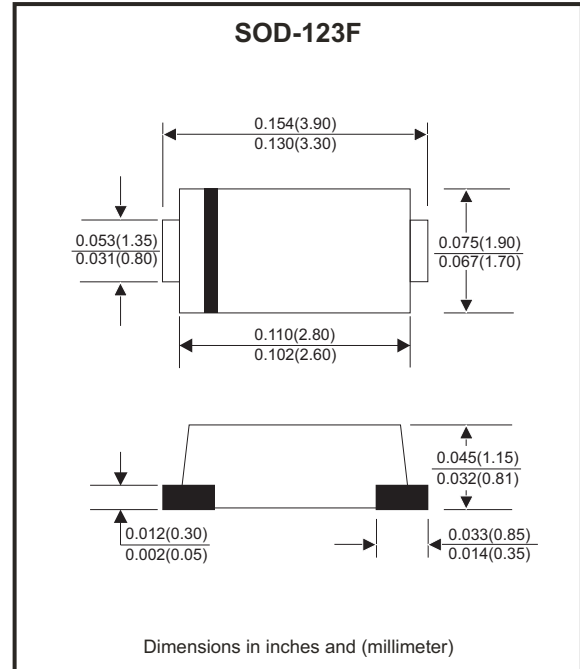


Features

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

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	CDBMS 220-HF	CDBMS 230-HF	CDBMS 240-HF	CDBMS 260-HF	CDBMS 280-HF	CDBMS 2100-HF	Unit	
Max. Repetitive peak reverse voltage	V _{RRM}	20	30	40	60	80	100	V	
Max. RMS voltage	V _{RMS}	14	21	28	42	56	70	V	
Max. DC blocking voltage	V _{DC}	20	30	40	60	80	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 @TA=25°C	V _F	0.52		0.66		0.83		V	
Max. DC reverse current @TA=25°C at Rated DC blocking voltage @TA=100°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 _{θJC}	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 (CDBMS220-HF Thru. CDBMS2100-HF)

Fig.1 - Typical Forward Current Derating Curve

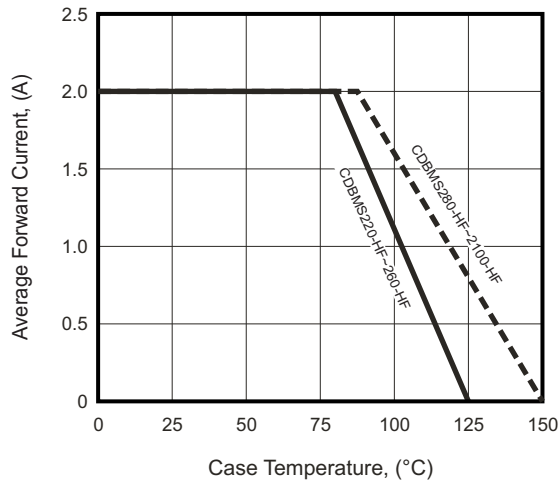


Fig.2 - Typical Forward Characteristics

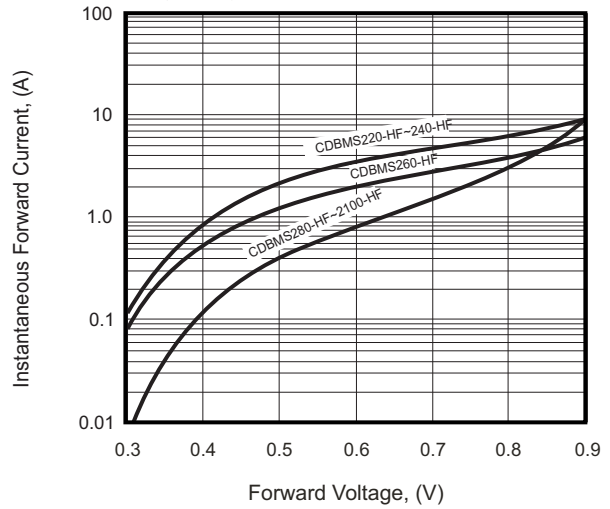


Fig.3 - Maximum Non-repetitive Forward Surge Current

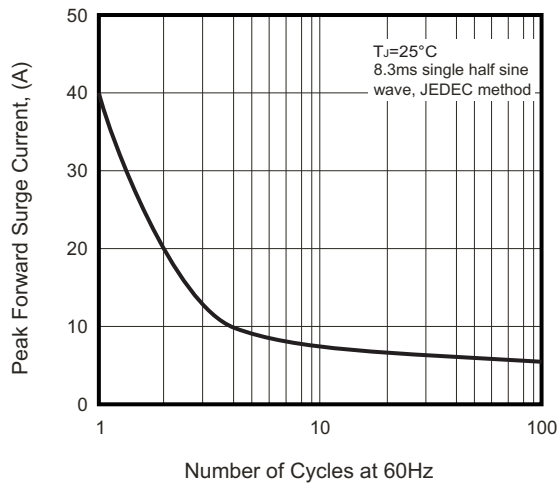


Fig.4 - Typical Reverse Characteristics

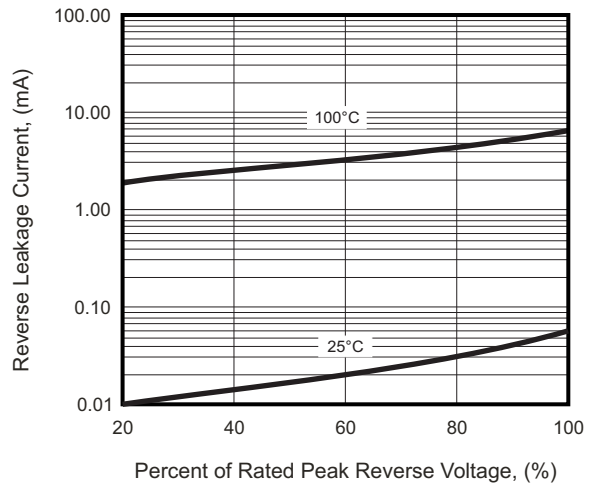
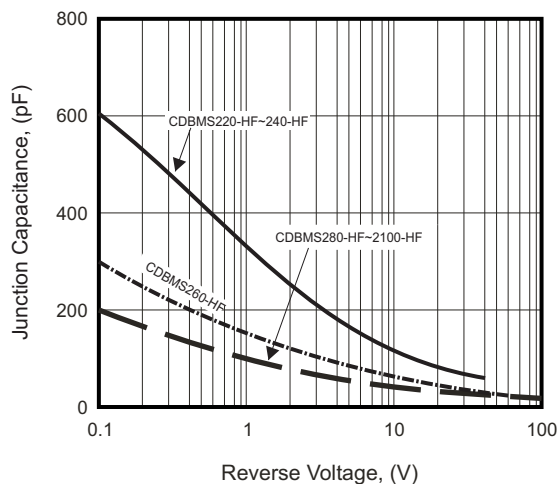
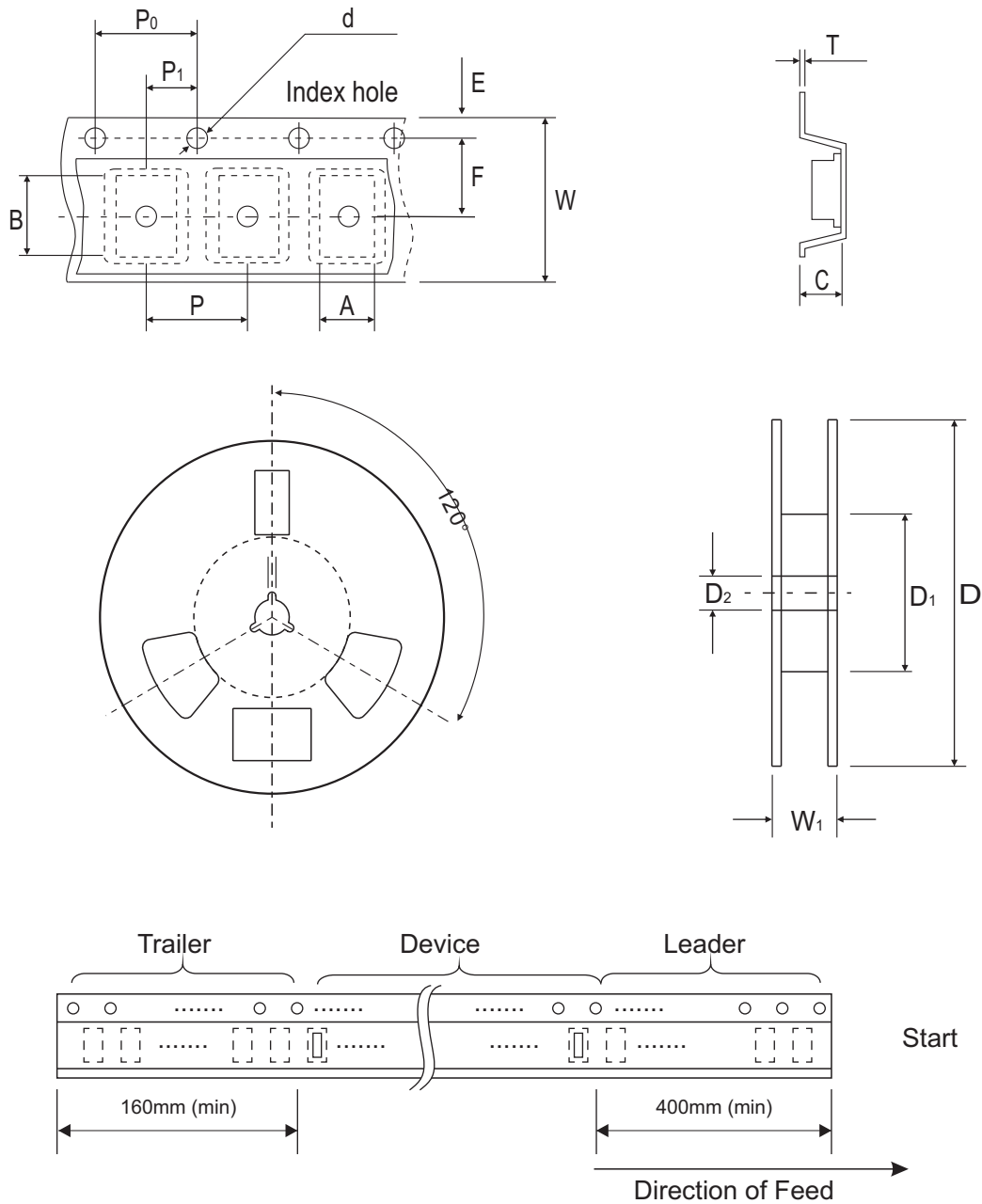


Fig.5 - Typical Junction Capacitance



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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	330.00 ± 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	12.992 ± 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	0.157 ± 0.004	0.157 ± 0.002	0.079 ± 0.002	0.472 ± 0.008	0.724 Max.

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Marking Code

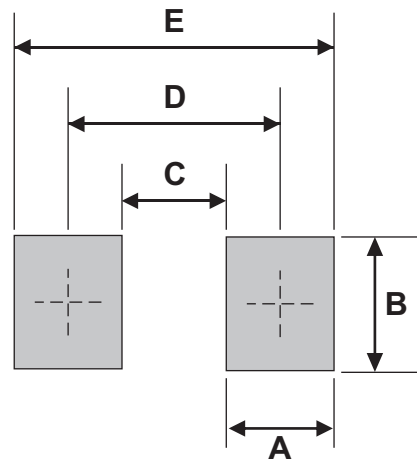
Part Number	Marking Code
CDBMS220-HF	T2.
CDBMS230-HF	T3.
CDBMS240-HF	T4.
CDBMS260-HF	T6.
CDBMS280-HF	T8.
CDBMS2100-HF	TA.



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