

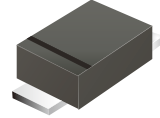
CDBMS240-HF Thru. CDBMS2100-HF

Reverse Voltage: 40 to 100 V

Forward Current: 2.0 A

RoHS Device

Halogen Free

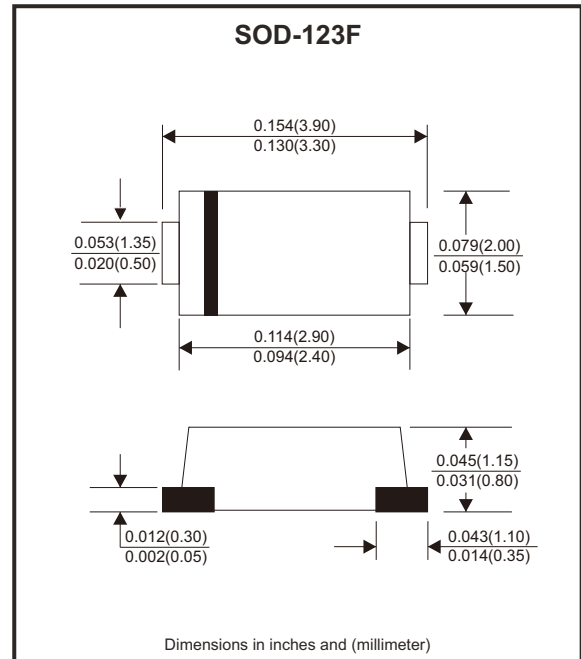


Features

- 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.



Circuit Diagram



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

Parameter	Symbol	CDBMS240-HF	CDBMS260-HF	CDBMS2100-HF	Unit
Maximum Repetitive peak reverse voltage	V _{RRM}	40	60	100	V
Maximum RMS voltage	V _{RMS}	28	42	70	V
Maximum DC blocking voltage	V _{DC}	40	60	100	V
Maximum Average forward rectified current	I _F	2			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	40			A
Maximum Instantaneous forward voltage I _F = 2A @ 25°C	V _F	0.52	0.66	0.83	V
Maximum 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	117	93	60	pF
Typical thermal resistance	R _{θJC}	43			°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.

Rating and Characteristic Curves (CDBMS240-HF Thru. CDBMS2100-HF)

Fig.1 - Typical Forward Current Derating Curve

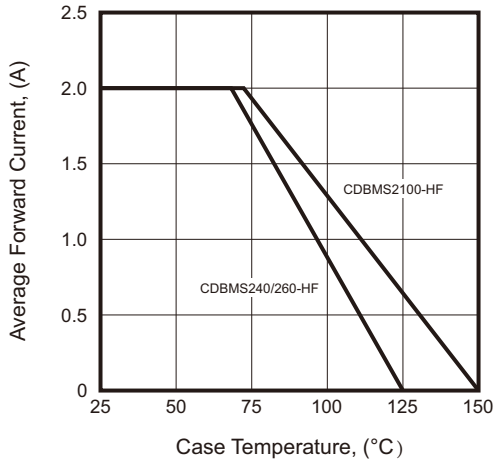


Fig.2 - Typical Forward Characteristics

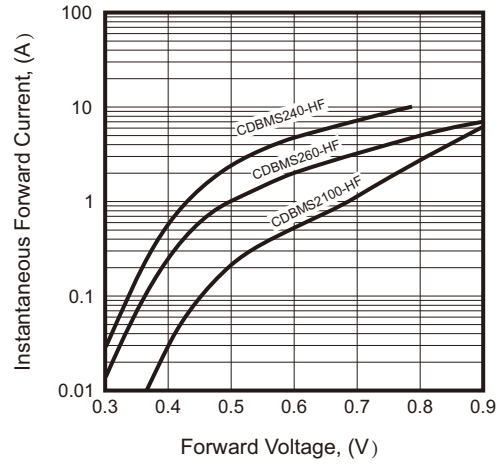


Fig.3 - Maximum Non-Repetitive Forward Surge Current

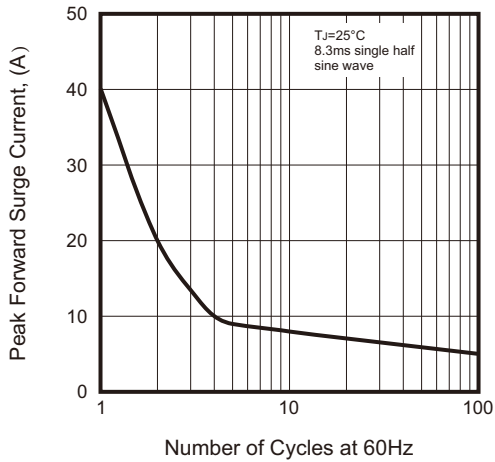


Fig.4 - Typical Reverse Characteristics

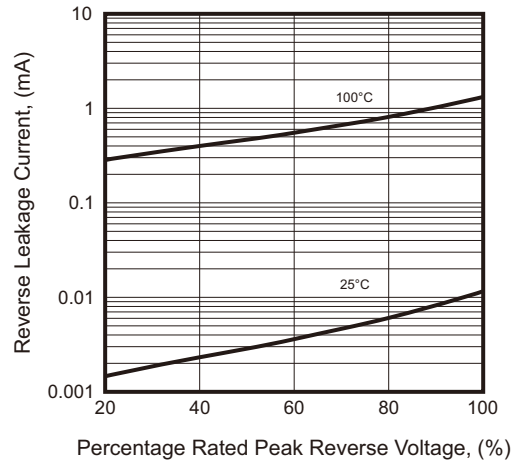
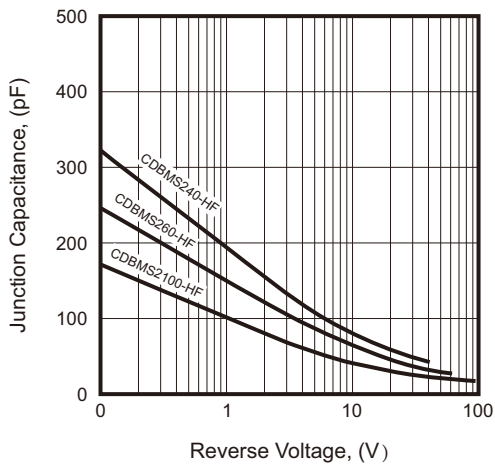
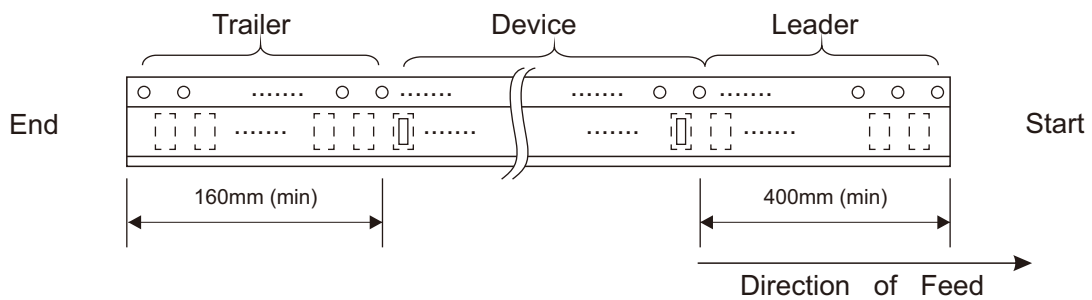
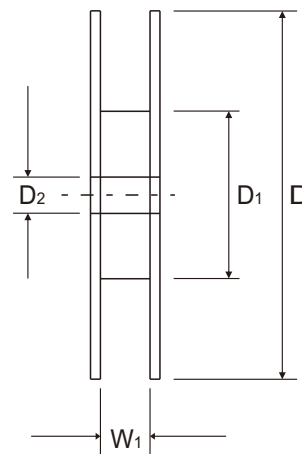
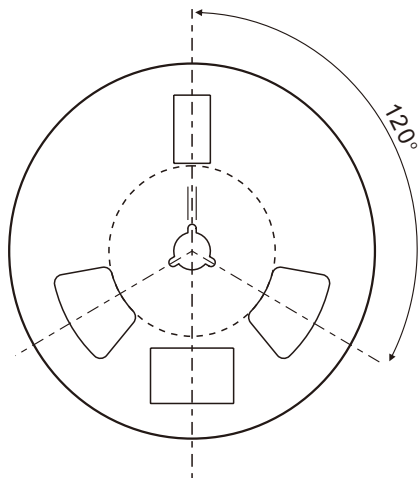
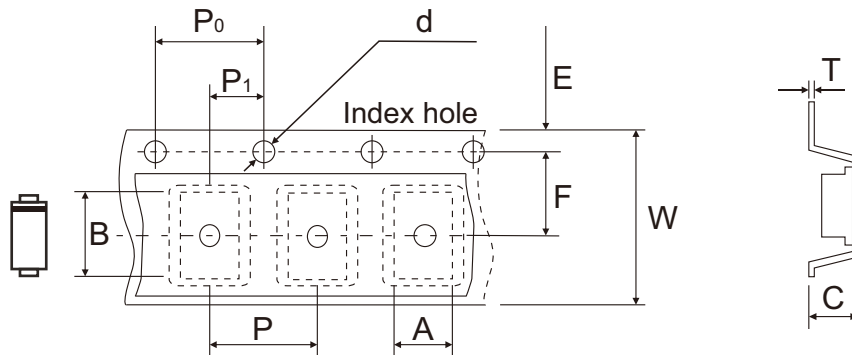


Fig.5 - Typical Junction Capacitance



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	

Marking Code

Part Number	Marking Code
CDBMS240-HF	T4.
CDBMS260-HF	T6.
CDBMS2100-HF	TA.

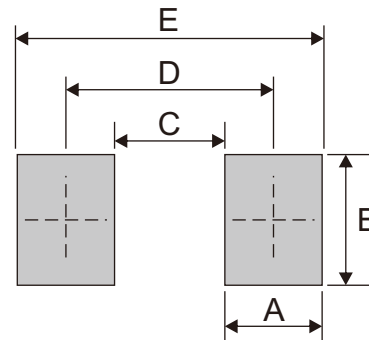


↑ Cathode Band

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

Suggested P.C.B. 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



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-123F	3,000	7