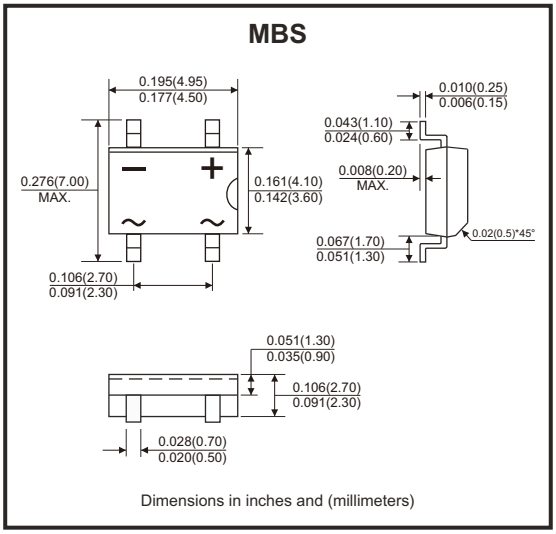
CDBHM2150L-HF Thru. CDBHM2200L-HF

Reverse Voltage: 150 to 200 V
Forward Current: 2.0 A
RoHS Device
Halogen Free



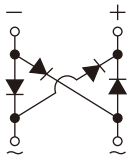
Features

- Schottky barrier chip.
- Low power loss, high efficiency.
- Ideally suited for automatic assembly.
- Surge overload rating to 50A peak.
- Plastic case material has UL flammability classification rating 94V-0.

Mechanical data

- Case: MBS, molded plastic.
- Terminals: Plated leads solderable per MIL-STD-202, method 208.
- Polarity: As marked on case.
- Mounting position: Any.

Circuit Diagram



Maximum Ratings and Electrical Characteristics (at T_A=25°C, unless otherwise specified)

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter		Symbol	CDBHM2150L-HF	CDBHM2200L-HF	Unit
Peak repetitive reverse voltage		V_{RRM}	150	200	V
RMS reverse voltage		V_{RMS}	105	140	V
DC blocking voltage		V_{DC}	150	200	V
Average rectified output current (Note 1) @T_C=100°C		$I_{F(AV)}$	2		A
Non-repetitive peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	50		A
I^2t rating for fusing (t < 8.3ms)		I^2t	10.375		A^2s
Forward voltage per element	I_F=2.0A	V_{FM}	0.9		V
Peak reverse current at rated DC blocking voltage	T_J=25°C	I_{RM}	0.05		mA
	T_J=100°C		5		
Typical junction capacitance (Note 2)		C_J	50		pF
Typical thermal resistance		$R_{\theta JL}$	16		°C/W
Operating junction temperature range		T_J	-55 to +150		°C
Operating and storage temperature range		T_{STG}	-55 to +150		°C

Notes: 1. Mounted on aluminum substrate PC board with 1.3mm² solder pad.
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Rating and Characteristics Curves (CDBHM2150L-HF Thru. CDBHM2200L-HF)

Fig.1 - Forward Current Derating Curve

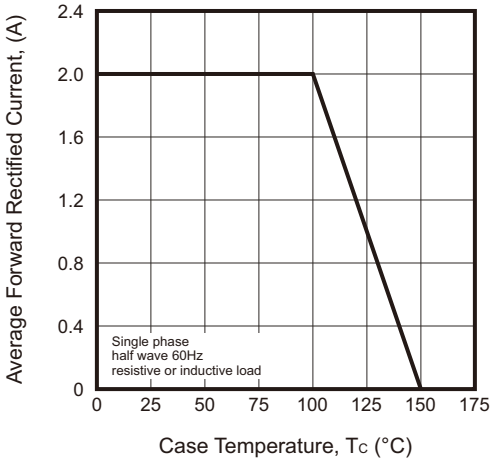


Fig.2 - Typical Instantaneous Forward Characteristics

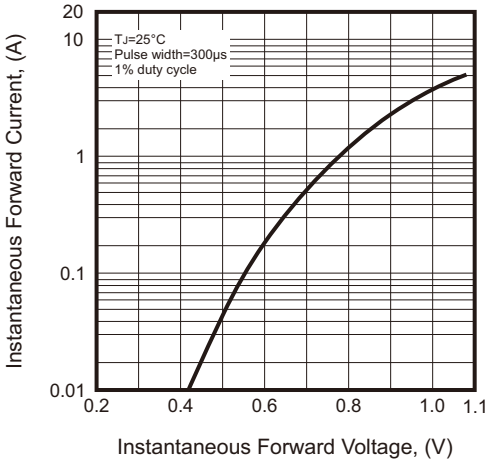


Fig.3 - Maximum Non-Repetitive Peak Forward Surge Current

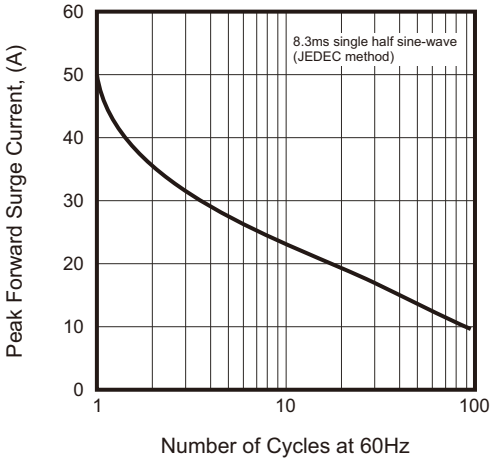


Fig.4 - Typical Junction Capacitance

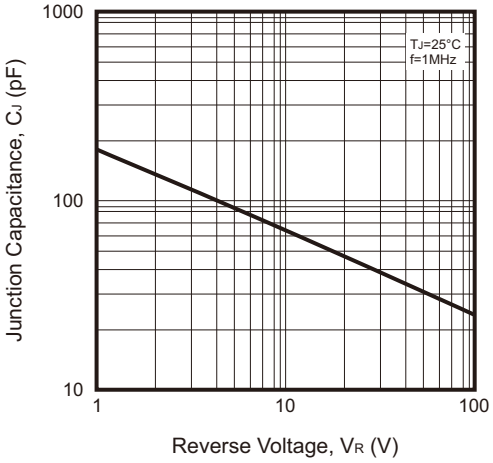
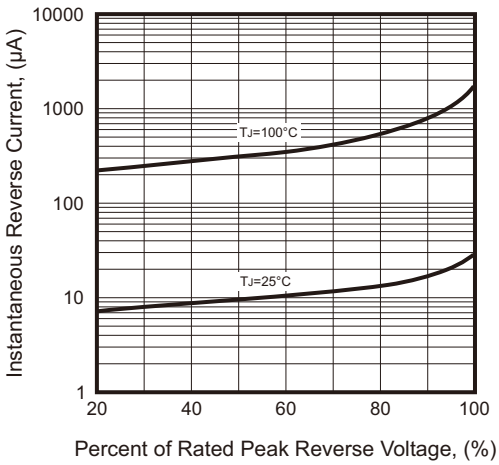
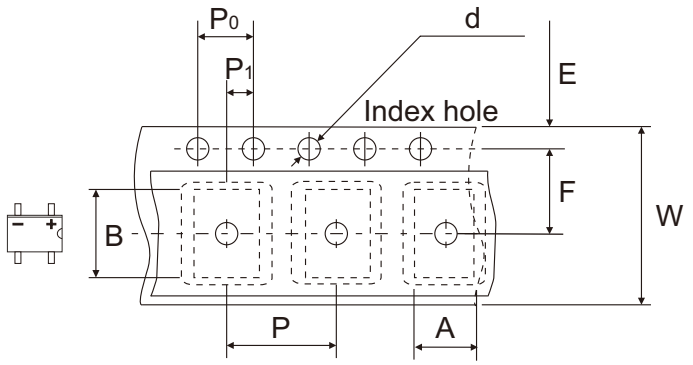
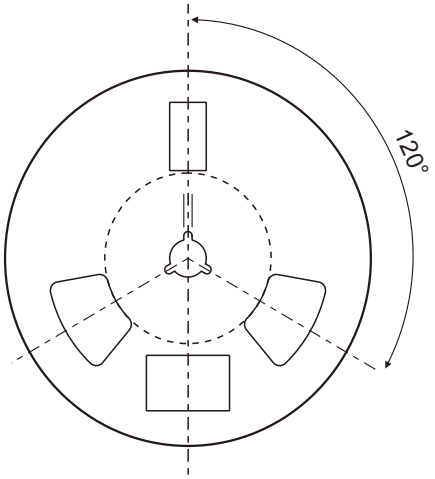


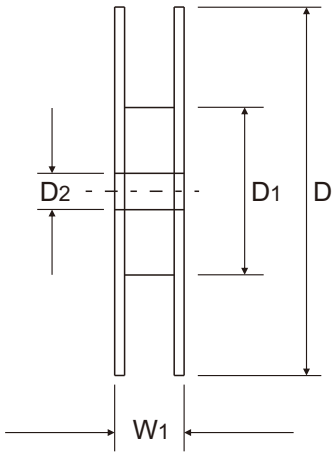
Fig.5 - Typical Reverse Characteristics

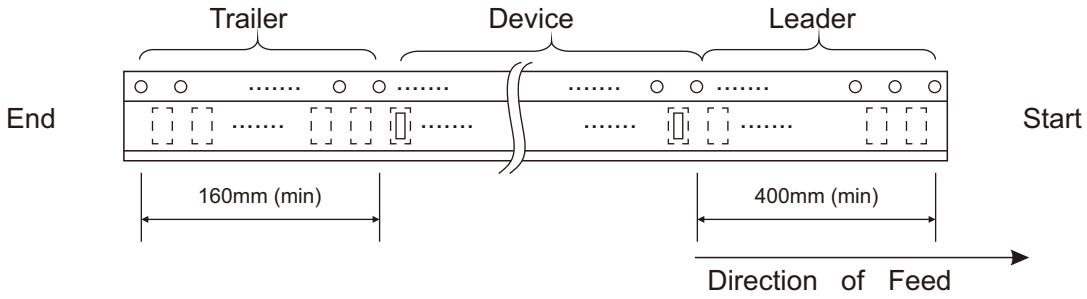


Reel Taping Specification







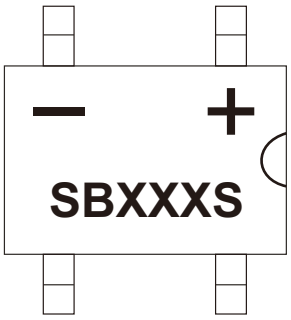


	SYMBOL	A	B	C	d	D	D1	D2
MBS	(mm)	4.90 ± 0.10	7.22 ± 0.10	2.88 ± 0.10	1.55 ± 0.05	330 ± 1.00	100 ± 0.50	13.00 + 0.50
	(inch)	0.193 ± 0.004	0.284 ± 0.004	0.113 ± 0.004	0.061 ± 0.002	12.992 ± 0.039	3.937 ± 0.020	0.512 + 0.020

	SYMBOL	E	F	P	P0	P1	T	W	W1
MBS	(mm)	1.75 ± 0.10	5.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.27 ± 0.03	12.00 ± 0.10	18.40 Max
	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.011 ± 0.001	0.472 ± 0.004	0.724 Max

Marking Code

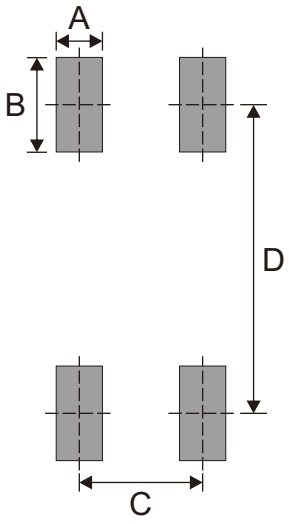
Part Number	Marking Code
CDBHM2150L-HF	SB215S
CDBHM2200L-HF	SB220S



xxx = Product type marking code

Suggested P.C.B. PAD Layout

SIZE	MBS	
	(mm)	(inch)
A	0.90	0.035
B	1.84	0.072
C	2.40	0.094
D	6.00	0.236



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
MBS	3,000	13