

# Low VF SMD Schottky Bridge Rectifiers

**Comchip**  
SMD Diode Specialist

## CDBHM1100L-G

Reverse Voltage: 100 V

Forward Current: 1.0 A

RoHS Device



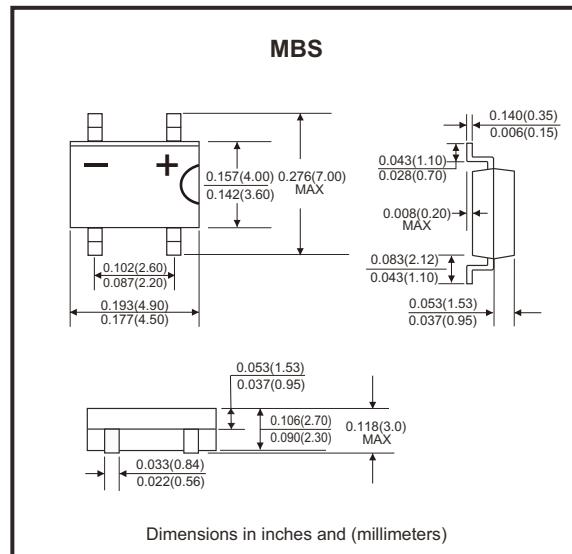
## Features

- High surge forward current capability.
- Low Forward voltage drop.
- General purpose 1 phase bridge rectifier applications.
- UL recognized file # E230084



## Mechanical data

- Case: molded plastic.
- Epoxy: UL 94V-0 rated flame retardant.
- Lead: Solder plated.
- Polarity: As marked.
- Weight: 0.125 grams (approx).



## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz resistive or inductive load.

For capacitive load, derate current by 20%

Parameter	Symbol	Conditions	CDBHM1100L-G	Units
Max. Repetitive peak reverse voltage	V <sub>RRM</sub>		100	V
Max. DC blocking voltage	V <sub>DC</sub>		100	V
Max. RMS voltage	V <sub>RMS</sub>		70	V
Average rectified output current @60Hz sine wave, R-load, T <sub>A</sub> =25°C	I <sub>O</sub>	On alumina substrate	1.0	A
		On glass-epoxy substrate	0.8	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>		40	A
Max. Peak forward voltage	V <sub>FM</sub>	I <sub>FM</sub> =0.5A	0.85	V
Max. Peak reverse current	I <sub>RRM</sub>	V <sub>RM</sub> =V <sub>RRM</sub>	0.5	mA
Max. Current squared time	I <sup>2</sup> t	1ms ≤ t ≤ 8.3ms, T <sub>A</sub> =25°C	6.6	A <sup>2</sup> S
Max. Thermal resistance	R <sub>θJA</sub> <sup>(1)</sup>	On alumina substrate	76	°C/W
		On glass-epoxy substrate	134	
	R <sub>θJL</sub>	Between junction and lead	20	
Operating temperature range	T <sub>J</sub>		-55 to +150	°C
Storage temperature range	T <sub>STG</sub>		-55 to +150	°C

Notes: 1. Between junction and ambient

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## Rating and Characteristics Curves (CDBHM1100L-G)

Fig.1 - Forward Current Derating Curve

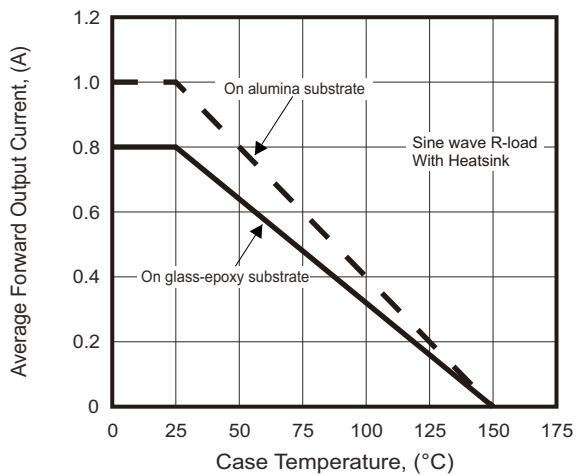


Fig.2 - Typical Forward Characteristics

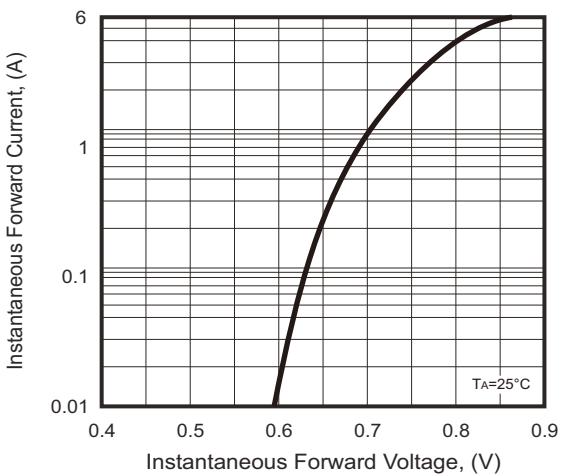


Fig.3 - Maximum Non-Repetitive Surge Current

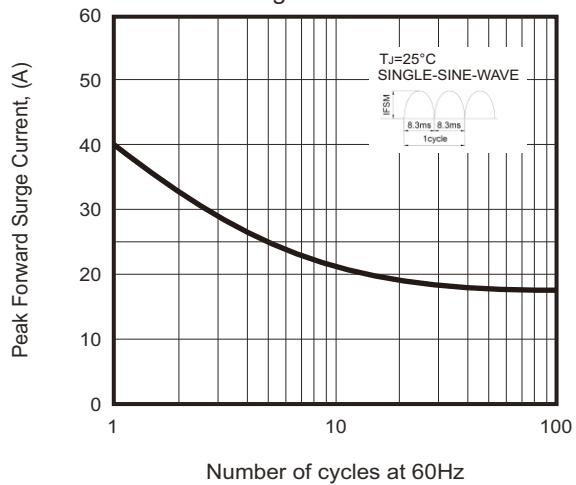
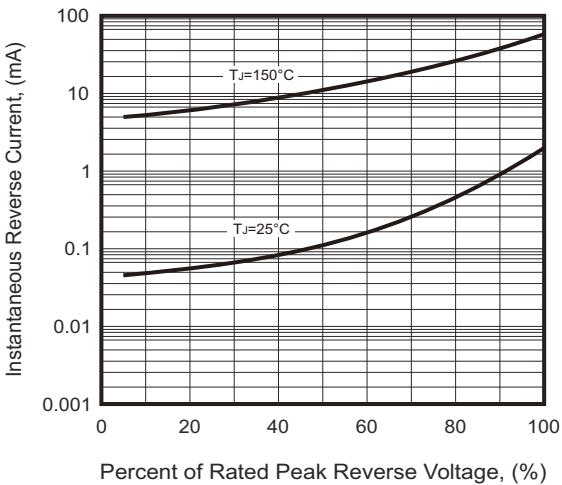
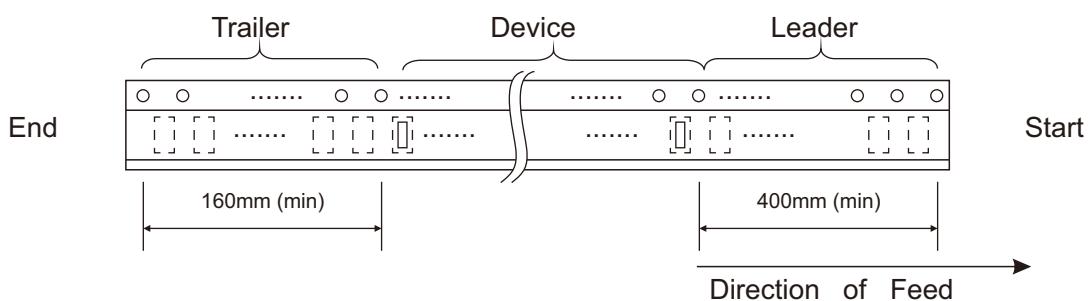
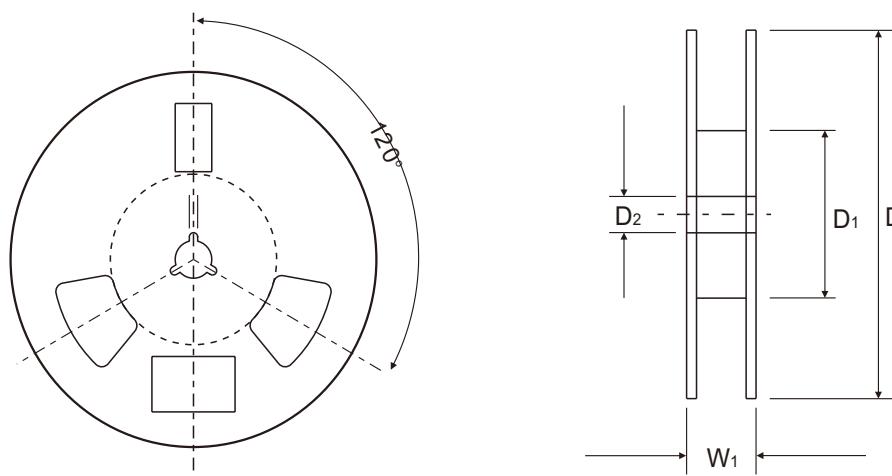
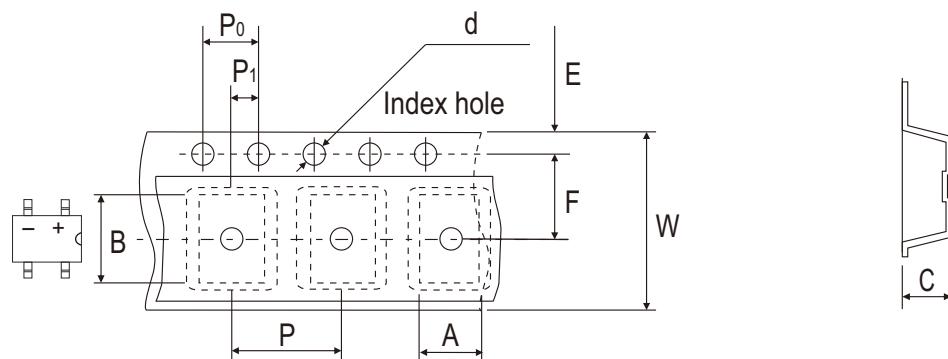


Fig.4 - Typical Reverse Characteristics



## Reel Taping Specification

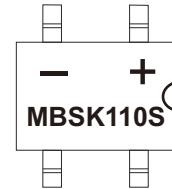


MBS	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	$5.00 \pm 0.10$	$7.24 \pm 0.10$	$2.95 \pm 0.10$	$1.55 \pm 0.05$	$330.0 \pm 2.00$	50.0 Min.	$13.0 \pm 0.50$
	(inch)	$0.197 \pm 0.004$	$0.285 \pm 0.004$	$0.116 \pm 0.004$	$0.061 \pm 0.002$	$13.00 \pm 0.079$	1.969 Min.	$0.512 \pm 0.020$

MBS	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	$1.75 \pm 0.10$	$5.50 \pm 0.05$	$8.00 \pm 0.10$	$4.00 \pm 0.10$	$2.00 \pm 0.10$	$12.00 \pm 0.30$	18.70 Max.
	(inch)	$0.069 \pm 0.004$	$0.217 \pm 0.002$	$0.315 \pm 0.004$	$0.157 \pm 0.004$	$0.079 \pm 0.004$	$0.472 \pm 0.012$	0.736 Max.

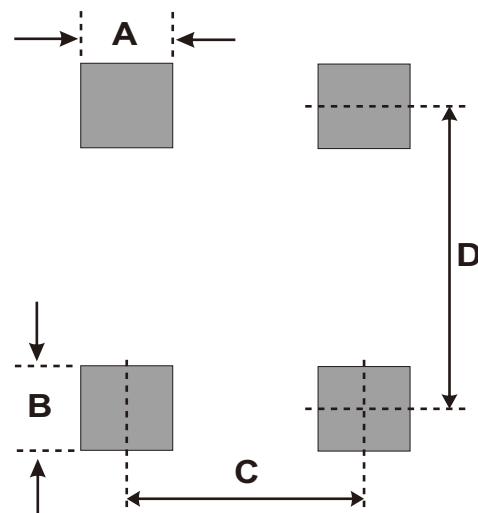
## Marking Code

Part Number	Marking Code
CDBHM1100L-G	MBSK110S



## Suggested P.C.B. PAD Layout

SIZE	MBS	
	(mm)	(inch)
A	1.20	0.047
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	2,500	13