

CBRDFA4-100

4A, 1000V Bridge Rectifier

in the BR DFN-A package



Rethink the PossibilitiesTM

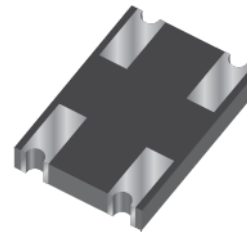
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CBRDFA4-100

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Top View

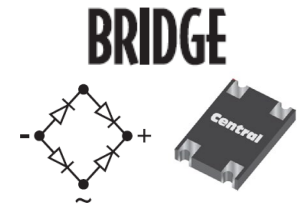


Bottom View

BR DFN-A

New CBRDFA4-100**FEATURES:**

- High 4.0A Current Rating
- Low V_F Diodes (1.0V MAX @ $I_F=4.0A$)

**MAXIMUM RATINGS:** ($T_A=25^\circ\text{C}$ unless otherwise noted)

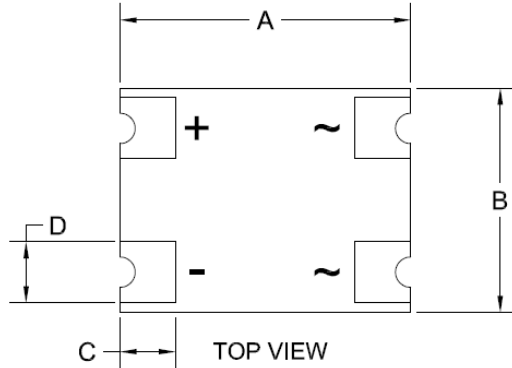
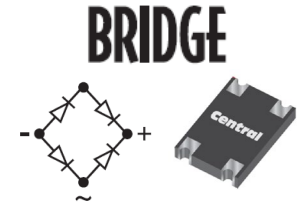
	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	1000	V
DC Blocking Voltage	V_R	1000	V
Average Forward Current ($T_C=112^\circ\text{C}$)	I_O	4.0	A
Peak Forward Surge Current (8.3ms)	I_{FSM}	150	A
Operating and Storage Junction Temperature	T_J, T_{stg}	-55 to +175	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS PER DIODE: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	$V_R=1000V$		5.0	μA
V_F	$I_F=4.0A$	0.95	1.0	V
C_J	$V_R=4.0V, f=1.0\text{MHz}$	45		pF

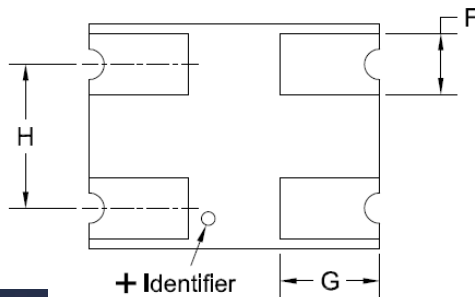
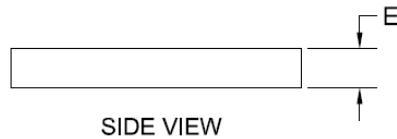
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BR DFN-A Mechanical Outline



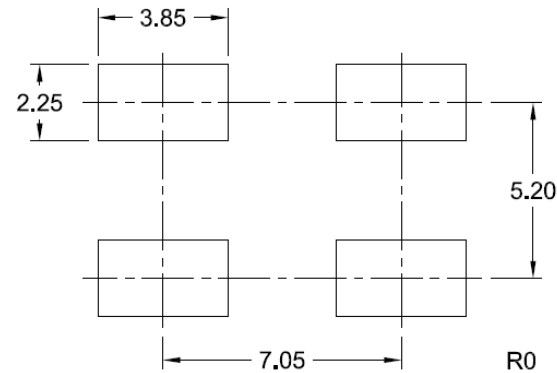
SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.409	0.417	10.40	10.60
B	0.315	0.323	8.00	8.20
C	0.073	0.085	1.85	2.15
D	0.083	0.091	2.10	2.30
E	0.049	0.061	1.25	1.55
F	0.083	0.091	2.10	2.30
G	0.138	0.146	3.50	3.70
H	0.201	0.209	5.10	5.30

BR DFN-A (REV: R0)



BOTTOM VIEW R0

SUGGESTED MOUNTING PADS
(Dimensions in mm)



MARKING CODE: BR4100



New CBRDFA4-100

Application Examples

Example 1

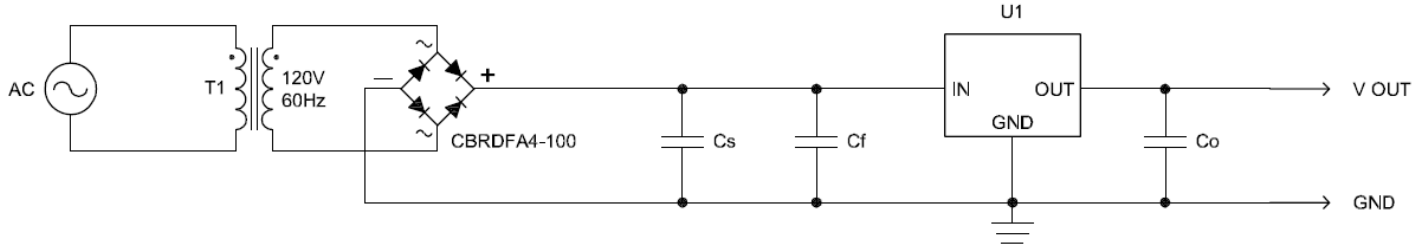
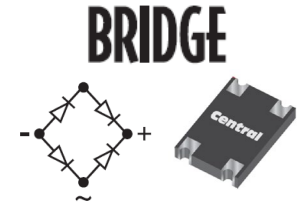


Figure 1. AC/DC Linear Regulator: The CBRDFA4-100 can provide AC to DC voltage rectification for linear regulation in any high power adapter or supply. AC voltage is converted to DC voltage and processed by a smoothing capacitor, where it then powers a linear regulator, yielding a flat DC output.

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Application Examples

Example 2

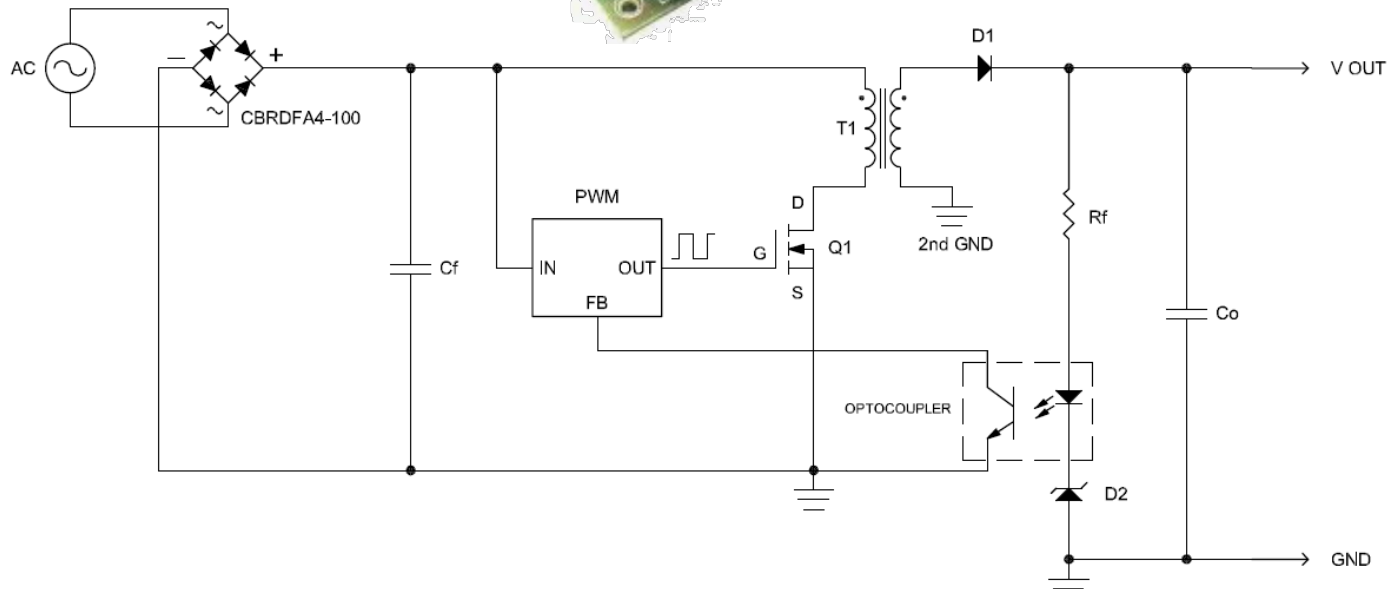
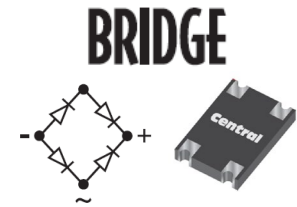
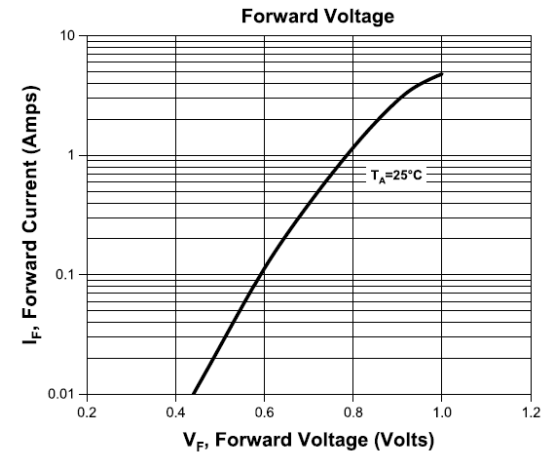
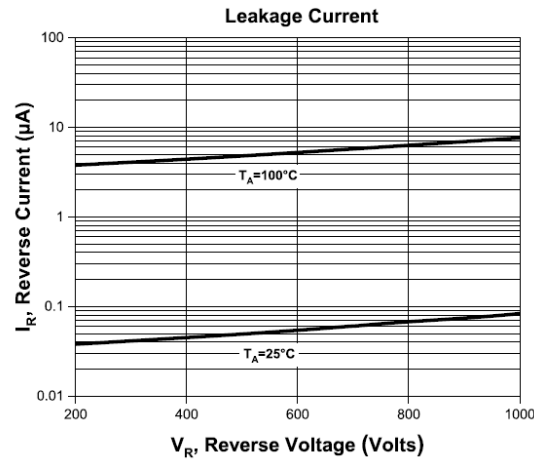
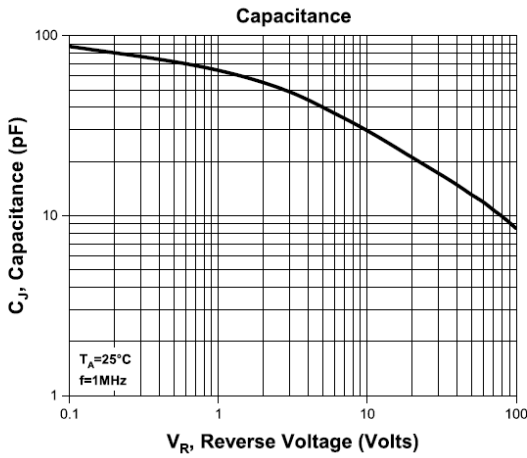
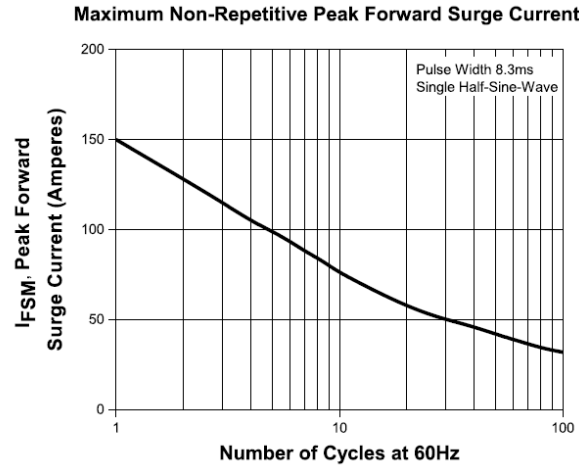
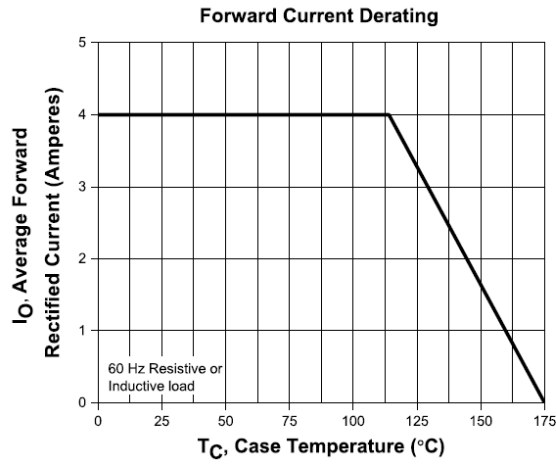
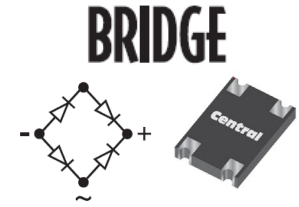
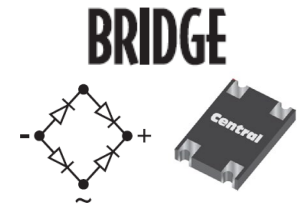


Figure 2. AC/DC Switched-Mode Power Supply: The CBRDFA4-100 provides a rectified DC signal to a PWM controlled MOSFET. The MOSFET acts as a switch, passing pulses of the signal through a transformer to a half-wave rectifier, which then converts the pulsed signal to DC. This DC signal is then used in a feedback loop with an optocoupler to power the PWM.

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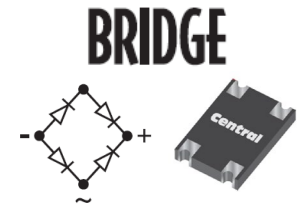
Electrical curves



New CBRDFA4-100

- Standard Packing Base: 3,000 on 7" Tape and Reel
- Inventory: 33,000 Tape and Reel in stock
- Distribution inventory: POs in process
 - Digi-Key, Mouser, Future
- Social media, ads, press release in process
- Available documents:
 - Datasheet
 - Product Brief

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For further information, please contact your Central Sales representation.



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