

### **VBD10 Series DC-DC Converters**

Rev. 06-2006

#### **Features**

- -10W Isolated Output
- -Efficiency to 82%
- -2:1 Input Range
- ·Pi Input Filter
- -Continuous short circuit protection
- Meets EN55022 Class A conducted



Model	Input	Output	Output	Current	Input	Current	
Number	Voltage	Voltage	Min.	Max.	No Load	Full Load	Efficiency
VBD10-D12-S5	9-18VDC	5VDC	100mA	2000mA	30mA	1100mA	76%
VBD10-D12-S12	9-18VDC	12VDC	45mA	830mA	30mA	1065mA	78%
VBD10-D12-S15	9-18VDC	15VDC	35mA	666mA	30mA	1065mA	78%
VBD10-D12-D12	9-18VDC	±12VDC	±25mA	±415mA	40mA	1065mA	78%
VBD10-D12-D15	9-18VDC	±15VDC	±20mA	±333mA	40mA	1065mA	78%
VBD10-D12-D5	9-18VDC	±5VDC	±50mA	±1000mA	40mA	1065mA	78%
VBD10-D24-S5	18-36VDC	5VDC	100mA	2000mA	20mA	535mA	78%
VBD10-D24-S12	18-36VDC	12VDC	45mA	830mA	20mA	520mA	80%
VBD10-D24-S15	18-36VDC	15VDC	35mA	666mA	20mA	520mA	80%
VBD10-D24-D12	18-36VDC	±12VDC	±25mA	±415mA	20mA	520mA	80%
VBD10-D24-D15	18-36VDC	±15VDC	±20mA	±333mA	20mA	520mA	80%
VBD10-D24-D5	18-36VDC	±5VDC	±50mA	±1000mA	20mA	520mA	80%
VBD10-D48-S5	36-72VDC	5VDC	100mA	2000mA	10mA	260mA	80%
VBD10-D48-S12	36-72VDC	12VDC	45mA	830mA	10mA	254mA	82%
VBD10-D48-S15	36-72VDC	15VDC	35mA	666mA	10mA	254mA	82%
VBD10-D48-D12	36-72VDC	±12VDC	±25mA	±415mA	10mA	254mA	82%
VBD10-D48-D15	36-72VDC	±15VDC	±20mA	±333mA	10mA	254mA	82%
VBD10-D48-D5	36-72VDC	±5VDC	±50mA	±1000mA	10mA	254mA	82%
VBD10-D5-S5	4.7-9VDC	5VDC	0mA	1600mA	15mA	2130mA	75%
VBD10-D5-S12	4.7-9VDC	12VDC	0mA	666mA	15mA	2100mA	76%
VBD10-D5-S15	4.7-9VDC	15VDC	0mA	533mA	15mA	2100mA	76%
VBD10-D5-D12	4.7-9VDC	±12VDC	0mA	±333mA	15mA	2100mA	76%
VBD10-D5-D15	4.7-9VDC	±15VDC	0mA	±266mA	15mA	2100mA	76%
VBD10-D5-D5	4.7-9VDC	±5VDC	0mA	±800mA	15mA	2100mA	76%



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Input

6 6.0			
Input Voltage Range	5V	4.7-9V	
	12V	9-18V	
	24V	18-36V	
	48V	36-72V	
Input Filter Type		PI Type	

# Output

Voltage Accuracy		±1.0% max.
Transient Response	Single 25% Step Load Change	<500µ sec.
Minimum Output Cu	ırrent	10% Full Load
Ripple & Noise	20MHz BW,	100mV p-p., max
Temperature Coeffic	cient	±0.02%/°C
Short Circuit Protect	etion	Continuous
Line Regulation <sup>1</sup>	Single Output	±0.2% max
Load Regulation <sup>2</sup>	Single Output	±1.0% max
Current Limit Thres	hold Range, % lo rated	110%~140%

**General Specifications** 

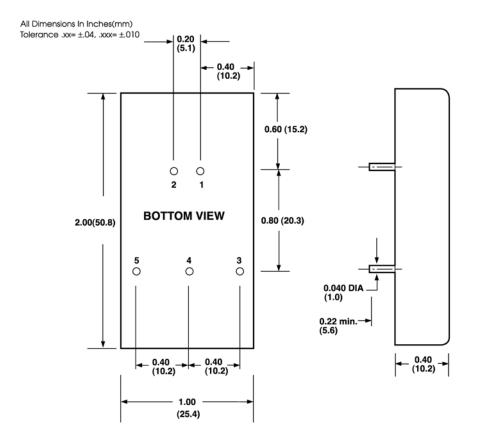
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Efficiency	see table
Isolation Voltage	500VDC min.
Isolation Resistance	10 <sup>9</sup> ohms min
Switching Frequency	200KHz, Type
Operating Temperature Range	-25°C to +71°C
Case Temperature	100°C max.
Storage Temperature	-40°C to +100°C
EMI/RFI	Six sided Continuous Shield
Dimensions	2.0x1.0x0.4 inches
	(50.8x25.4x10.2mm)
Case Material	Black Coated Copper with
	Non-Conductive Base

#### NOTES:

- 1. Measured from high line to low line
- 2. Measured from full load to 1/4 load



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> V·INFINITY

NNECTION	PIN CC
Function	Pin
+Inpu	ĵ.
-Inpu	2.
+Outpu	3.
Common/N	4.
-Outpu	5.

NP\*-NO PIN ON SINGLE OUTPUT

All Specifications Typical At Nominal Line, Full Load and 25°C Unless Otherwise Noted.

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