

**PART NUMBER:** VBD10 Series**DESCRIPTION:** DC/DC Converter**features**

- 10W isolated output
- 2:1 input range
- efficiency to 82%
- Pi input filter
- continuous short circuit protection
- meets EN55022 class A, conducted



model number	input voltage	output voltage	output current		input current		efficiency
			min.	max.	no load	full load	
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%

**PART NUMBER:** VBD10 Series**DESCRIPTION:** DC/DC Converter**INPUT**

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 current	10% full load	
ripple & noise	20MHz BW,	100mV p-p., max
temperature coefficient	±0.02%/°C	
short circuit protection	continuous	
line regulation <sup>1</sup>	single output	±0.2% max
load regulation <sup>2</sup>	single output	±1.0% max
current limit threshold range, % Io rated	110%~140%	

**GENERAL SPECIFICATIONS**

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:**

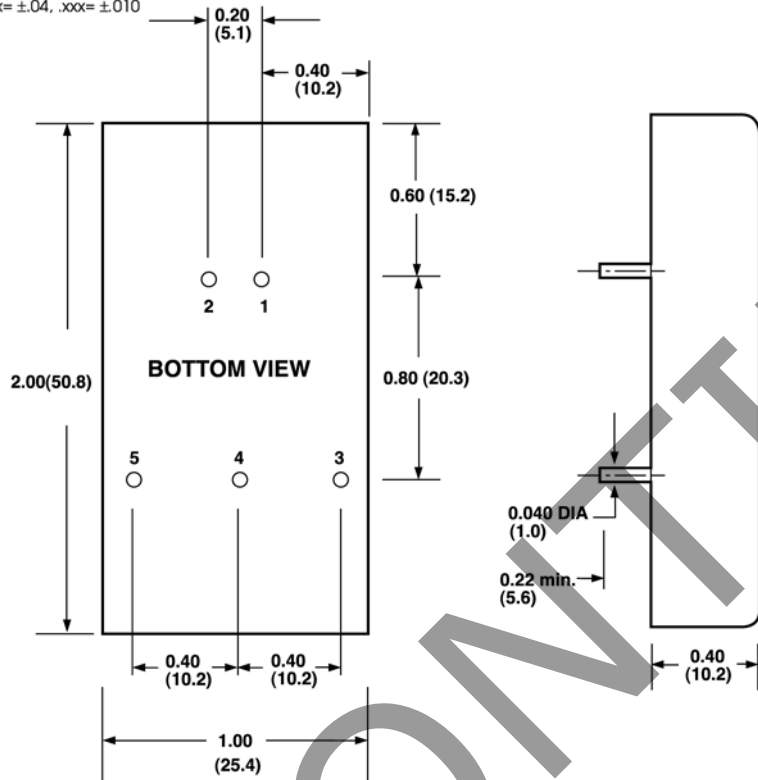
1. Measured from high line to low line
2. Measured from full load to 1/4 load

**PART NUMBER:** VBD10 Series

**DESCRIPTION:** DC/DC Converter

**DIMENSIONS (mm)**

All Dimensions In Inches(mm)  
Tolerance .xx= ±.04, .xxx= ±.010



PIN CONNECTION	
Pin	Function
1.	+Input
2.	-Input
3.	+Output
4.	Common/NP
5.	-Output

NP\*-NO PIN ON SINGLE OUTPUT

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