

PART NUMBER: VBBD7R5 series

DESCRIPTION: DC/DC converter

features

- 7.5W Isolated output
- remote on/off option (suffix “-1”)
- efficiency to 82%
- 2:1 input range
- regulated outputs
- continuous short circuit protection
- meets EN55022 Class B, conducted
- Pi input filter



model number	input voltage	output voltage	output current	input current		efficiency
				no load	full load	
VBBD7R5-D12-S3R3	9-18VDC	3.3VDC	1500mA	7.5mA	557mA	74%
VBBD7R5-D12-S5	9-18VDC	5VDC	1500mA	7.5mA	820mA	76%
VBBD7R5-D12-S12	9-18VDC	12VDC	625mA	7.5mA	780mA	80%
VBBD7R5-D12-S15	9-18VDC	15VDC	500mA	7.5mA	780mA	80%
VBBD7R5-D12-D12	9-18VDC	±12VDC	±310mA	12mA	775mA	80%
VBBD7R5-D12-D15	9-18VDC	±15VDC	±250mA	12mA	780mA	80%
VBBD7R5-D12-D5	9-18VDC	±5VDC	±750mA	7.5mA	820mA	76%
VBBD7R5-D24-S3R3	18-36VDC	3.3VDC	1500mA	5mA	271mA	76%
VBBD7R5-D24-S5	18-36VDC	5VDC	1500mA	5mA	400mA	78%
VBBD7R5-D24-S12	18-36VDC	12VDC	625mA	5mA	380mA	82%
VBBD7R5-D24-S15	18-36VDC	15VDC	500mA	5mA	380mA	82%
VBBD7R5-D24-D12	18-36VDC	±12VDC	±310mA	7.5mA	385mA	81%
VBBD7R5-D24-D15	18-36VDC	±15VDC	±250mA	7.5mA	385mA	81%
VBBD7R5-D24-D5	18-36VDC	±5VDC	±750mA	7.5mA	400mA	78%
VBBD7R5-D48-S3R3	36-72VDC	3.3VDC	1500mA	3mA	136mA	76%
VBBD7R5-D48-S5	36-72VDC	5VDC	1500mA	2mA	200mA	78%
VBBD7R5-D48-S12	36-72VDC	12VDC	625mA	2mA	192mA	81%
VBBD7R5-D48-S15	36-72VDC	15VDC	500mA	2mA	192mA	81%
VBBD7R5-D48-D12	36-72VDC	±12VDC	±310mA	3mA	192mA	81%
VBBD7R5-D48-D15	36-72VDC	±15VDC	±250mA	3mA	192mA	81%
VBBD7R5-D48-5	36-72VDC	±5VDC	±750mA	3mA	200mA	78%

PART NUMBER: VBBD7R5 series

DESCRIPTION: DC/DC converter

INPUT

input voltage range	12V:	9-18V
	24V:	18-36V
	48V:	36-72V
input filter	Pi type	

OUTPUT

voltage accuracy		±2.0%max.
voltage balance (dual)		±1.0%max.
temperature coefficient		±0.05%/ °C
ripple & noise, 20MHz BW	3.3V/ 5V	100mV p-p max.
	12V/ 15V	1%p-p max
short circuit protection		continuous
line regulation single/dual ¹		±0.5%
load regulation single ²		±1.5%
	dual ³	±1.0%

GENERAL SPECIFICATIONS

efficiency		see table
isolation voltage		1500VDC min.
isolation resistance		10 ⁹ Ohms
switching frequency		100KHz, min.
operating temperature range		-25°C to +71°C
case temperature		100° max.
cooling		free-air convection
storage temperature range		-40°C to +100°C
EMI/RFI		conductive EMI Meet EN55022 class B
dimensions		2x1x0.4 inches
		(50.8x25.4x10.2mm)
case material		black coated copper with non-conductive base

NOTES:

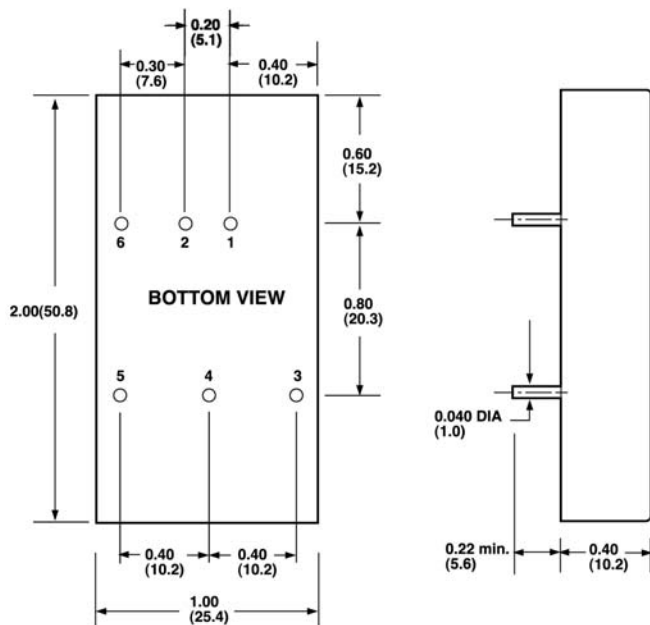
1. measured from high line to low line
2. measured from full load to 10%load
3. measured from full load to 1/4 load
4. suffix "-1" to the model number with remote on/off

PART NUMBER: VBBD7R5 series

DESCRIPTION: DC/DC converter

DIMENSIONS (mm)

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



Remote On/Off Control

Logic Compatibility	CMOS or Open Collector TTL
Ec-On	>+5.5 VDC or Open Circuit
Ec-Off	<1.8 VDC
Shutdown Idle Current	10mA
Control Common	Referenced to Input Minus

PIN CONNECTION

Pin	Function
1.	+Input
2.	-Input
3.	+Output
4.	Common/NP
5.	-Output
6.	NP (Remote ON/OFF)

*NP-NO PIN

DERATING CURVE

