

PART NUMBER: VBBD7R5**DESCRIPTION:** dc-dc converter**features**

- 7.5W Isolated output
- efficiency to 82%
- 2:1 input range
- regulated outputs
- continuous short circuit protection
- meets EN55022 Class B, conducted
- Pi input filter



MODEL	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%

NOTE:

add suffix "-1" to the model number for remote on/off option

**PART NUMBER:** VBBD7R5**DESCRIPTION:** dc-dc converter**INPUT**

parameter	conditions/description	min	nom	max	units
input voltage range	12 V	9		18	V
	24 V	18		36	V
	48 V	36		72	V
input filter	pi type				

OUTPUT

parameter	conditions/description	min	nom	max	units
voltage accuracy			±2		%
voltage balance (dual)			±1		%
temperature coefficient			±0.05		%/°C
ripple & noise, 20 MHz BW	3.3, 5 V			100	mVp-p
	12, 15 V			1	%p-p
short circuit protection	continuous				
line regulation	measured from high line to low line		±0.5		%
load regulation	single: measured from full load to 10%		±1.5		%
	dual: measured from full load to 1/4 load		±1		%

GENERAL SPECIFICATIONS

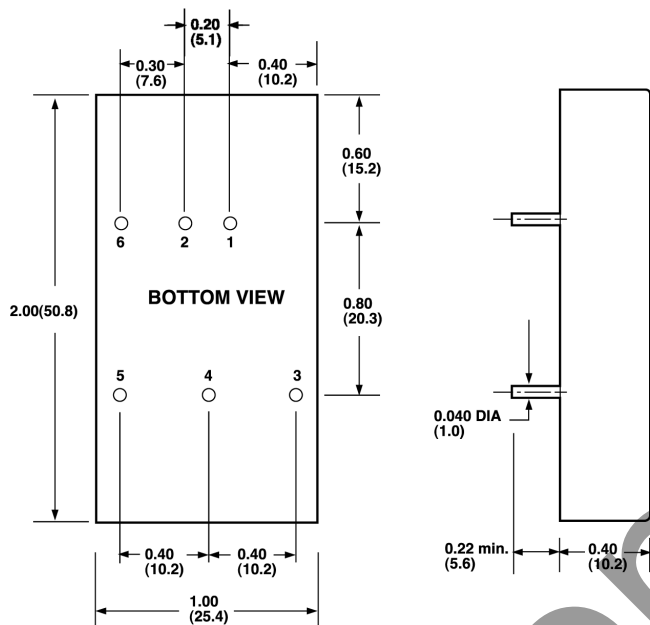
parameter	conditions/description	min	nom	max	units
efficiency	see table				
isolation voltage		1500			V dc
isolation resistance			10 ⁷		Ω
switching frequency		100			kHz
operating temperature range		-25		+71	°C
case temperature				100	°C
cooling	free-air convection				
storage temperature range		-40		100	°C
EMI/RFI	conductive EMI meet EN55022 class B				
dimensions	2 x 1 x 0.4 inches (50.8 x 25.4 x 10.2 mm)				
case material	black coated copper with non-conductive base				

PART NUMBER: VBBD7R5

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

