VBBD7R5 Series DC-DC Converters

Features

- 7.5W Isolated output
- Remote on/off option
- 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 No Load	Input Current Full Load	Effic.	Case
VBBD7R5-D12-S5	9-18VDC	5VDC	1500mA	7.5mA	820mA	76	B
VBBD7R5-D12-S12	9-18VDC	12VDC	625mA	7.5mA	780mA	80	B
VBBD7R5-D12-S15	9-18VDC	15VDC	500mA	7.5mA	780mA	80	B
VBBD7R5-D12-D12	9-18VDC	±12VDC	±310mA	12mA	775mA	80	B
VBBD7R5-D12-D15	9-18VDC	±15VDC	±250mA	12mA	780mA	80	B
VBBD7R5-D12-D5	9-18VDC	±5VDC	±750mA	7.5mA	820mA	76	B
VBBD7R5-D12-S3R3	9-18VDC	3.3VDC	1500mA	7.5mA	557mA	74	B
VBBD7R5-D24-S5	18-36VDC	5VDC	1500mA	5mA	400mA	78	B
VBBD7R5-D24-S12	18-36VDC	12VDC	625mA	5mA	380mA	82	B
VBBD7R5-D24-S15	18-36VDC	15VDC	500mA	5mA	380mA	82	B
VBBD7R5-D24-D12	18-36VDC	±12VDC	±310mA	7.5mA	385mA	81	B
VBBD7R5-D24-D15	18-36VDC	±15VDC	±250mA	7.5mA	385mA	81	B
VBBD7R5-D24-D5	18-36VDC	±5VDC	±750mA	7.5mA	400mA	78	B
VBBD7R5-D48-S3R3	36-72VDC	3.3VDC	1500mA	5mA	271mA	76	B
VBBD7R5-D48-S5	36-72VDC	5VDC	1500mA	2mA	200mA	78	B
VBBD7R5-D48-S12	36-72VDC	12VDC	625mA	2mA	192mA	81	B
VBBD7R5-D48-S15	36-72VDC	15VDC	500mA	2mA	192mA	81	B
VBBD7R5-D48-D12	36-72VDC	±12VDC	±310mA	3mA	192mA	81	B
VBBD7R5-D48-D15	36-72VDC	±15VDC	±250mA	3mA	192mA	81	B
VBBD7R5-D48-5	36-72VDC	±5VDC	±750mA	3mA	200mA	78	B
VBBD7R5-D48-S3R3	36-72VDC	3.3VDC	1500mA	3mA	136mA	76	B

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

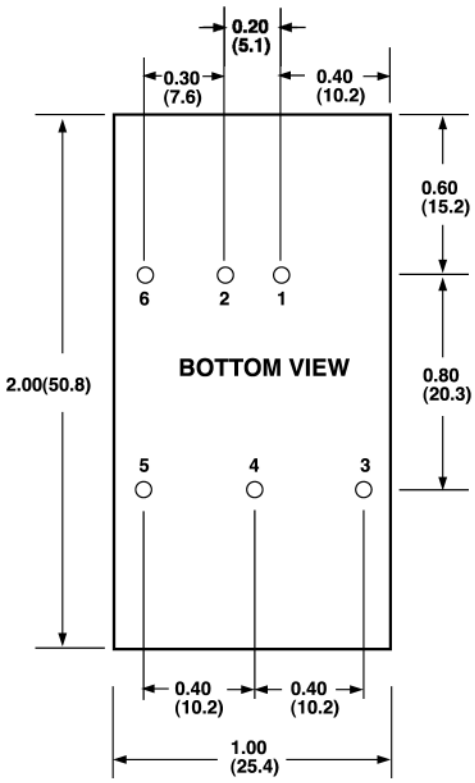
Efficiency	see table
Isolation Voltage	1500VDC min.
Isolation Resistance	10^9Ohms
Switching Frequency	200KHz, min.
Operating Temperature Range	-25°C to +71°C
Case Temperature	100° max.
Cooling	Free-Air Convection
Storage Temperature Range	-40°C to +100°C
EMI/RFI	Conductive EMI Meet EN55022 Class B
Dimensions	2x1x0.4 inches (50.8x25.4x10.2mm)
Case Material	Black Coated Copper With Non-Conductive Base

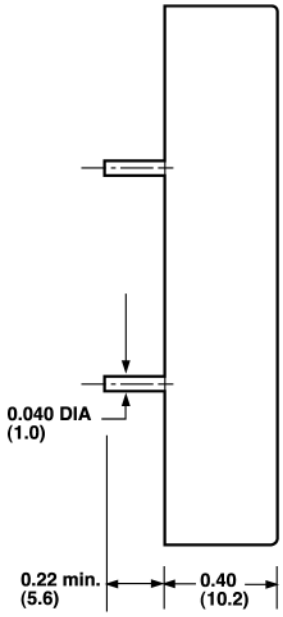
NOTES:

1. Measured from High Line to Low Line
2. Measured from Full Load to10%Load
3. measured from Full Load to 1/4 Load
4. Suffix “T” to the Model Number with Remote On/Off

Case C

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

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