

PART NUMBER: VCDB15 series

DESCRIPTION: DC/DC converter

features

- .15W isolated output
- 2:1 input range
- efficiency to 82%
- 200 KHz switching frequency
- six-sided shield
- regulated outputs
- Pi input filter
- continuous short circuit protection
- meets EN55022 class B, conducted



model number	input voltage	output voltage	output current	input current		efficiency
				no load	full load	
VCDB15-D12-S3R3	9-18VDC	3.3VDC	3000mA	30mA	1178mA	70%
VCDB15-D12-S5	9-18VDC	5VDC	3000mA	30mA	1660mA	75%
VCDB15-D12-S12	9-18VDC	12VDC	1250mA	30mA	1625mA	78%
VCDB15-D12-S15	9-18VDC	15VDC	1000mA	30mA	1625mA	78%
VCDB15-D12-D12	9-18VDC	±12VDC	±625mA	35mA	1620mA	77%
VCDB15-D12-D15	9-18VDC	±15VDC	±500mA	35mA	1620mA	77%
VCDB15-D12-D5	9-18VDC	±5VDC	±1500mA	35mA	1620mA	77%
VCDB15-D24-S3R3	18-36VDC	3.3VDC	3000mA	15mA	557mA	74%
VCDB15-D24-S5	18-36VDC	5VDC	3000mA	15mA	812mA	78%
VCDB15-D24-S12	18-36VDC	12VDC	1250mA	20mA	772mA	81%
VCDB15-D24-S15	18-36VDC	15VDC	1000mA	20mA	772mA	81%
VCDB15-D24-D12	18-36VDC	±12VDC	±625mA	25mA	780mA	80%
VCDB15-D24-D15	18-36VDC	±15VDC	±500mA	25mA	780mA	80%
VCDB15-D24-D5	18-36VDC	±5VDC	±1500mA	25mA	780mA	80%
VCDB15-D48-S3R3	36-72VDC	3.3VDC	3000mA	20mA	271mA	76%
VCDB15-D48-S5	36-72VDC	5VDC	3000mA	10mA	390mA	80%
VCDB15-D48-S12	36-72VDC	12VDC	1250mA	15mA	381mA	82%
VCDB15-D48-S15	36-72VDC	15VDC	1000mA	15mA	381mA	82%
VCDB15-D48-D12	36-72VDC	±12VDC	±625mA	20mA	386mA	81%
VCDB15-D48-D15	36-72VDC	±15VDC	±500mA	20mA	386mA	81%
VCDB15-D48-D5	36-72VDC	±5VDC	±1500mA	20mA	386mA	81%

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INPUT

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

OUTPUT

voltage accuracy	
single output	±1.0% max.
dual +output	±1.0% max.
dual -output	±3.0% max.
voltage balance dual output at full load	±1.0% max.
transient response: single 25% step load change	<500µ sec.
dual FL-1/2±1% error band	<500µ sec.
ripple & noise, 20MHz BW	10mV RMS.max.
	75mV p-p max.
temperature coefficient	±0.02%/°C
short circuit protection	indefinite & current limit
line regulation ¹ single/dual output	±0.2% max.
line regulation ² single/dual output	±1.0% max.

GENERAL SPECIFICATIONS

efficiency	see table
isolation voltage	500VDC min.
isolation resistance	10 ⁹ Ohm
switching frequency	200KHz, typical
operating temperature range	-25°C to +71°C
case temperature	100°C max.
cooling	free-air convection
storage temperature range	-40°C to +100°C
EMI/RFI	conductive EMI meet EN55022 class B
dimensions	2x2x0.4 inches
	(50.8x50.8x10.2mm)
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
3. determine the correct fuse size by calculating the maximum DC current drain at low line input, maximum load and then adding 20 to 25% to get desired fuse size.
4. alternative pin configuration suffix "S"

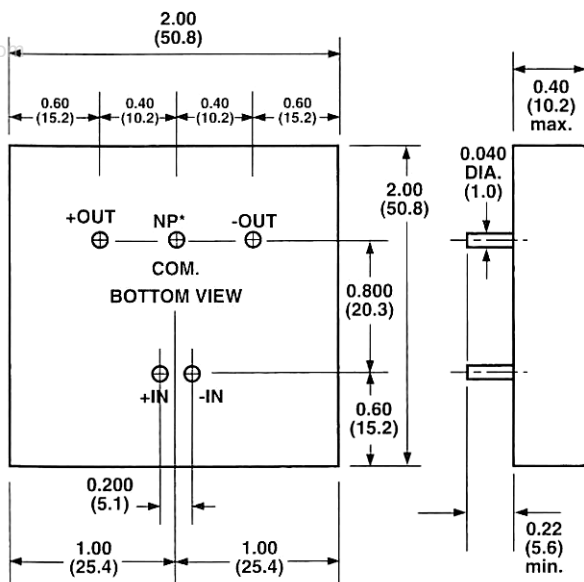
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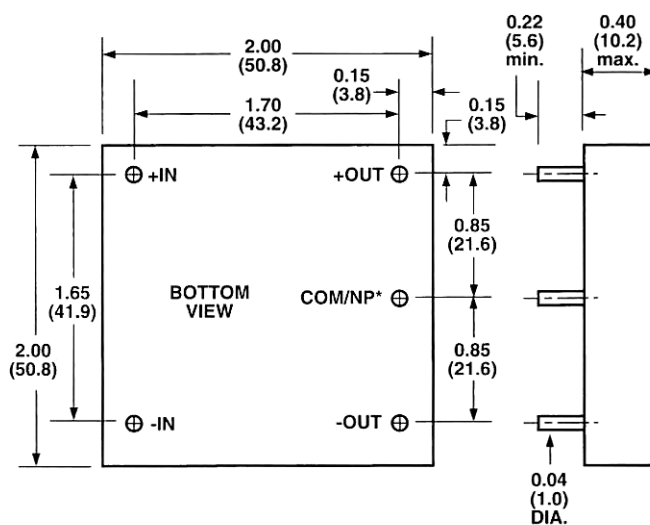
DIMENSIONS (mm)

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

STANDARD PIN CONFIGURATION



ALTERNATIVE PIN CONFIGURATION SUFFIX "S"



*NP-NO PIN ON SINGLE OUTPUT MODELS.

DERATING CURVE

