

**PART NUMBER:** VBED15

**DESCRIPTION:** dc-dc converter

**Features**

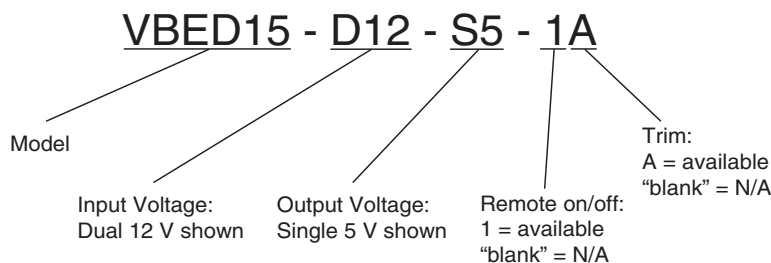
- 15W Isolated Output
- Efficiency to 83%
- 2:1 Input Range
- Continuous Short Circuit Protection
- Remote On/Off Control
- Meets EN55022 Class A, Conducted



MODEL	Input Voltage	Output Voltage	Output Current	Input Current		Efficiency
				No Load	Full Load	
VBED15-D12-S5	9-18VDC	5VDC	3000mA	20mA	1602mA	78%
VBED15-D12-S12	9-18VDC	12VDC	1250mA	20mA	1524mA	82%
VBED15-D12-S 15	9-18VDC	15VDC	1000mA	20mA	1524mA	82%
VBED15-D12-D12	9-18VDC	±12VDC	±625mA	30mA	1506mA	83%
VBED15-D12-D15	9-18VDC	±15VDC	±500mA	30mA	1506mA	83%
VBED15-D12-D5	9-18VDC	±5VDC	±1500mA	30mA	1563mA	80%
VBED15-D12-S3R3	9-18VDC	3.3VDC	3000mA	20mA	1086mA	76%
VBED15-D24-S5	18-36VDC	5VDC	3000mA	20mA	780mA	80%
VBED15-D24-S12	18-36VDC	12VDC	1250mA	20mA	762mA	82%
VBED15-D24-S15	18-36VDC	15VDC	1000mA	20mA	762mA	82%
VBED15-D24-D12	18-36VDC	±12VDC	±625mA	25mA	755mA	83%
VBED15-D24-D15	18-36VDC	±15VDC	±500mA	25mA	755mA	83%
VBED15-D24-D5	18-36VDC	±5VDC	±1500mA	25mA	772mA	81%
VBED15-D24-S3R3	18-36VDC	3.3VDC	3000mA	20mA	543mA	76%
VBED15-D48-S5	36-72VDC	5VDC	3000mA	15mA	391mA	80%
VBED15-D48-S12	36-72VDC	12VDC	1250mA	15mA	377mA	83%
VBED15-D48-S15	36-72VDC	15VDC	1000mA	15mA	377mA	83%
VBED15-D48-D12	36-72VDC	±12VDC	±625mA	20mA	377mA	83%
VBED15-D48-D15	36-72VDC	±15VDC	±500mA	20mA	377mA	83%
VBED15-D48-D5	36-72VDC	±5VDC	±1500mA	20mA	381mA	82%
VBED15-D48-S3R3	36-72VDC	3.3VDC	3000mA	15mA	271mA	76%

**NOTE:**  
add suffix "-1" to the part number for remote on/off option

**PART NUMBER KEY**



**PART NUMBER:** VBED15**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			±1		%
voltage balance (dual)			±1		%
temperature coefficient			±0.02		%/°C
transient response	single: 25% step load change	500			μ sec.
	dual: FL-122L, ±1% error band	500			μ sec.
ripple & noise, 20 MHz BW	0.1 μF capacitor on output			75	mVp-p
short circuit protection	continuous				
line regulation	measured from high line to low line		±0.2		%
load regulation	measured from full load to 1/4 load		±0.1		%

**GENERAL SPECIFICATIONS**

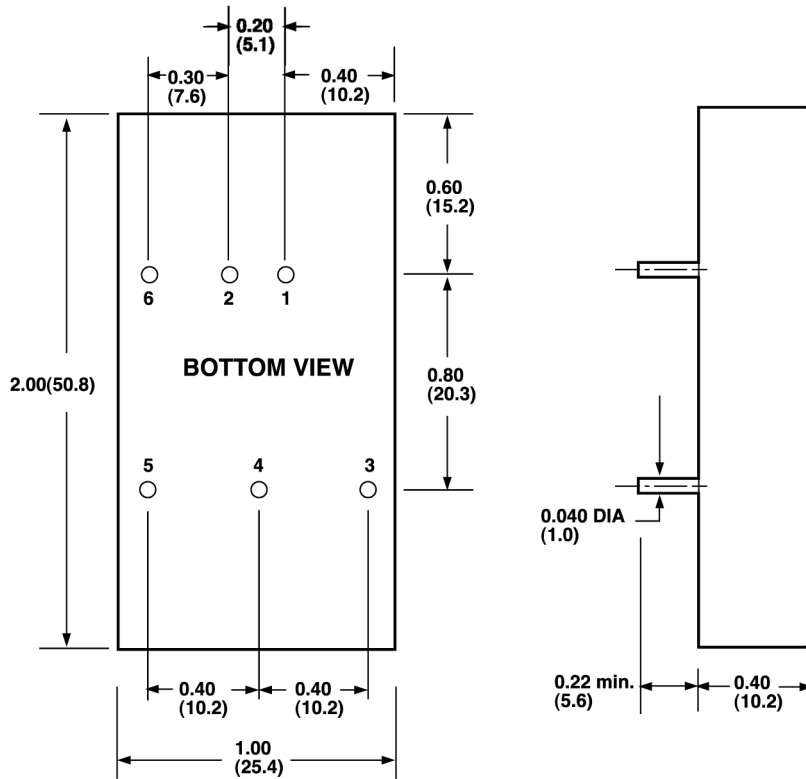
parameter	conditions/description	min	nom	max	units
efficiency	see table				
isolation voltage		500			V dc
isolation resistance			10 <sup>8</sup>		Ω
switching frequency			300		kHz
operating temperature range		-25		+71	°C
case temperature				100	°C
cooling	free-air convection				
storage temperature range		-40		100	°C
EMI/RFI	conductive EMI meet EN55022 class B				
safety	approved to UL60950 (E222736)				
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				
weight				32	g

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**DIMENSIONS (mm)**

All Dimensions In Inches(mm)  
Tolerance .xx= ±.04, .xxx= ±0.10

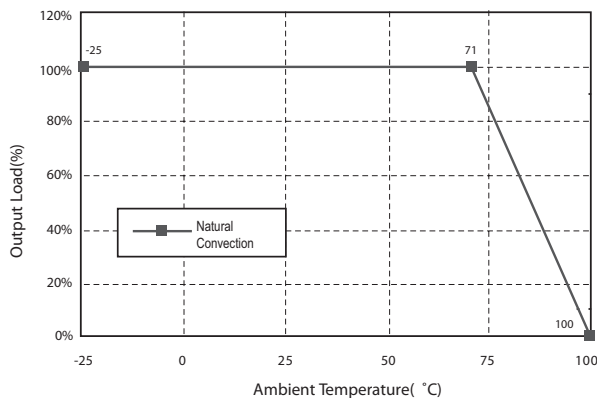


**PIN CONNECTION**

Pin	Function
1.	+V Input
2.	-V Input
3.	+V Output
4.	Common/NP/Trim (Option)
5.	-V Output
6.	NP/Remote (Option)

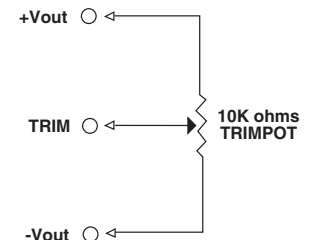
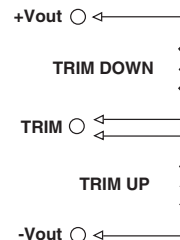
NP\*-NO PIN ON SINGLE OUTPUT

**DERATING CURVE**



**EXTERNAL TRIM OUTPUT**

Output may optionally be externally trimmed (±10%) with a fixed resistor or an external trimpot as shown.



**NOTE:**  
add suffix "A" to the part number for external trim option