

# EC3BB

S E R I E S

## 7.5 WATT EN55022 CLASS B DC-DC CONVERTERS



### Features

- 7.5W Isolated Output
- 2"x 1" Case
- Regulated Outputs
- Efficiency to 82%
- Pi Input Filter
- Continuous Short Circuit Protection
- Meets EN55022 Class B, Conducted
- Remote On/Off Control (Option)

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	SIZE
				NO LOAD	FULL LOAD		
EC3BB01	9-18 VDC	5 VDC	1500 mA	7.5 mA	820 mA	76	2" x 1"
EC3BB02		12 VDC	625 mA	7.5 mA	780 mA	80	
EC3BB03		15 VDC	500 mA	7.5 mA	780 mA	80	
EC3BB04		±12 VDC	±310 mA	12 mA	775 mA	80	
EC3BB05		±15 VDC	±250 mA	12 mA	780 mA	80	
EC3BB06		±5 VDC	±750 mA	7.5 mA	820 mA	76	
EC3BB07		3.3 VDC	1500 mA	7.5 mA	557 mA	74	
EC3BB11	18-36 VDC	5 VDC	1500 mA	5 mA	400 mA	78	2" x 1"
EC3BB12		12 VDC	625 mA	5 mA	380 mA	82	
EC3BB13		15 VDC	500 mA	5 mA	380 mA	82	
EC3BB14		±12 VDC	±310 mA	7.5 mA	385 mA	81	
EC3BB15		±15 VDC	±250 mA	7.5 mA	385 mA	81	
EC3BB16		±5 VDC	±750 mA	7.5 mA	400 mA	78	
EC3BB17		3.3 VDC	1500 mA	5 mA	271 mA	76	
EC3BB21	36-72 VDC	5 VDC	1500 mA	2 mA	200 mA	78	2" x 1"
EC3BB22		12 VDC	625 mA	2 mA	192 mA	81	
EC3BB23		15 VDC	500 mA	2 mA	192 mA	81	
EC3BB24		±12 VDC	±310 mA	3 mA	192 mA	81	
EC3BB25		±15 VDC	±250 mA	3 mA	192 mA	81	
EC3BB26		±5 VDC	±750 mA	3 mA	200 mA	78	
EC3BB27		3.3 VDC	1500 mA	3 mA	136 mA	76	

NOTE: 1. Nominal Input Voltage 12, 24 or 48 VDC

### Specifications

#### INPUT SPECIFICATIONS:

Input Voltage Range.....	12V.....	9-18V
	24V.....	18-36V
	48V.....	36-72V
Input Filter.....	Pi Type	

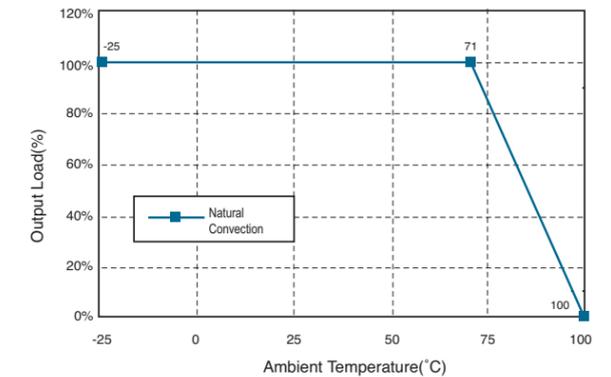
#### OUTPUT SPECIFICATIONS:

Voltage Accuracy.....	±2.0% max.	
Voltage Balance (Dual).....	±1.0% max.	
Temperature Coefficient.....	±0.05%/°C	
Ripple and Noise, 20MHz BW.....	3.3V/5V.....	100mV p-p max.
	12V/15V.....	1% p-p max.
Short Circuit Protection.....	Continuous	
Line Regulation, Single/Dual <sup>1</sup> .....	± 0.5% max.	
Load Regulation, Single <sup>2</sup> .....	± 0.5% max.	
	Dual <sup>3</sup> .....	± 1.0% max.

#### GENERAL SPECIFICATIONS:

Efficiency.....	See Table	
Isolation Voltage.....	1500 VDC min.	
Isolation Resistance.....	10 <sup>9</sup> Ohms	
Switching Frequency.....	100KHz, min.	
Operating Ambient Temperature Range .....	-25°C to +71°C	
De-rating, Above 71°C .....	Linearly to Zero power at 100°C	
Case Temperature <sup>5</sup> .....	100°C max	
Cooling .....	Natural Convection	
Storage Temperature Range.....	-40°C to + 100°C	
EMI / RFI.....	Conductive EMI Meet EN55022 Class B	
Dimensions.....	2.00 x 1.00 x 0.40 inches (50.8 x 25.4 x 10.2mm)	
Case Material.....	Black Coated Copper With Non-Conductive Base	
Weight.....	32.5g	

### EC3BB Series Derating Curve



#### NOTE:

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 "T" to the Model Number with Remote ON/OFF
5. Maximum case temperature under any operating condition should not exceed 100°C.

#### 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

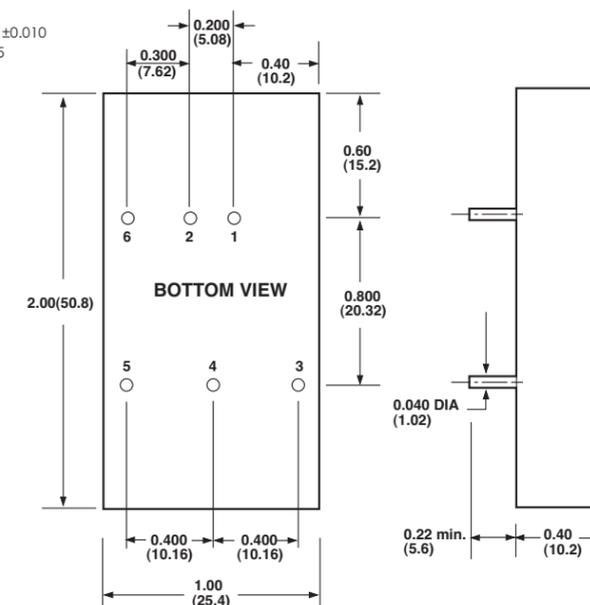
#### PIN CONNECTION

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

\*NP-NO PIN

### CASE B

All Dimensions In Inches (mm)  
Tolerances Inches: x.xx= ±0.04, x.xxx= ±0.010  
Millimeters: x.x= ±1, x.xx= ±0.25



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

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