

# 15 Watt

# 2x1 Inch Package BU 2:1 Input Range - Metal Case



- o Wide Input Range
- o Pi Input Filter
- o Regulated Output
- o Efficiency up to 90%
- o Continuous Short Circuit Protection
- o Without Tantalum Capacitors Inside
- o Conductive EMI Meets EN55022 Class A
- o Safety Meets UL60950-1, EN60950-1 and IEC60950-1

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT (FULL LOAD)	INPUT CURRENT		%EFF	CAPACITOR LOAD
				NO LOAD	FULL LOAD		
15BURS12W3.3LC	9-18 VDC	3.3 VDC	4000 mA	90 mA	1280 mA	85	4000 µF
15BURS12W5LC		5 VDC	3000 mA	85 mA	1453 mA	88	3000 µF
15BURS12W12LC		12 VDC	1250 mA	70 mA	1420 mA	88	1330 µF
15BURS12W15LC		15 VDC	1000 mA			88	1000 µF
15BURD12W5LC		±5 VDC	±1500 mA	45 mA	1470 mA	85	1470 µF
15BURD12W12LC		±12 VDC	±625 mA		1436 mA	87	660 µF
15BURD12W15LC		±15 VDC	±500 mA		1420 mA	88	550 µF
15BURS24W3.3LC	18-36 VDC	3.3 VDC	4000 mA	50 mA	640 mA	86	4000 µF
15BURS24W5LC		5 VDC	3000 mA		718 mA	89	3000 µF
15BURS24W12LC		12 VDC	1250 mA	20 mA	695 mA	90	1330 µF
15BURS24W15LC		15 VDC	1000 mA			90	1000 µF
15BURD24W5LC		±5 VDC	±1500 mA	25 mA	726 mA	86	1470 µF
15BURD24W12LC		±12 VDC	±625 mA		710 mA	88	660 µF
15BURD24W15LC		±15 VDC	±500 mA		702 mA	89	550 µF
15BURS48W3.3LC	36-75 VDC	3.3 VDC	4000 mA	25 mA	320 mA	86	4000 µF
15BURS48W5LC		5 VDC	3000 mA	30 mA	359 mA	88	3000 µF
15BURS48W12LC		12 VDC	1250 mA	20 mA	347 mA	90	1330 µF
15BURS48W15LC		15 VDC	1000 mA		351 mA	90	1000 µF
15BURD48W5LC		±5 VDC	±1500 mA		363 mA	86	1470 µF
15BURD48W12LC		±12 VDC	±625 mA	355 mA	88	660 µF	
15BURD48W15LC		±15 VDC	±500 mA	351 mA	89	550 µF	

**SPECIFICATIONS**

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

**INPUT SPECIFICATIONS**

Input Voltage Range				2:1
Undervoltage Lockout	12 V Models	power up 8.4	power down 8.0 VDC	
	24 V Models	power up 17	power down 16 VDC	
	48 V Models	power up 34	power down 32 VDC	
Input Surge Voltage (100 ms max.)	12 Vin			25 VDC max.
	24 Vin			50 VDC max.
	48 Vin			100 VDC max.
Input Filter				Pi Type

**OUTPUT SPECIFICATIONS**

Voltage Accuracy				±1.5% max.
Voltage Balance (Dual)				±2.0% max.
Transient Response: 25% Step Load Change				<500 µs
Ripple and Noise at 20 MHz BW (Measured with 0.1 µF MLCC)				100 mV p-p max.
Temperature Coefficient				±0.03%/°C max.
Short Circuit Protection				Continuous
Line Regulation <sup>1)</sup>	Single			±0.2% max.
	Dual			±0.5% max.
Load Regulation <sup>2)</sup>	Single			±0.2% max.
	Dual			±1.0% max.
Cross Regulation (Dual Output) Load cross variation 10%/100%				±5% max.
Over Voltage Protection				Zener or TVS Clamp
Current Limit				110%-140% Nominal Output
Start up Time				20 ms max.
Remote Positive ON/OFF Control add Suffix "R"	Logic Compatibility	CMOS or Open Collector TTL, Referenced to -Vin		
	Module ON	>5.5 VDC to 75 VDC or Open Circuit		
	Module OFF	<1.2 VDC		
Output Voltage Adjustable External Trim Adj. Range add Suffix "T"				>±10% (Single Output Models only)

**NOTE:**

1. Measured from High Line to Low Line.
2. Measured from Full Load to min. Load.

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<b>GENERAL SPECIFICATION</b>	
Efficiency	see table
Isolation Voltage	1500 VDC min.
Isolation Resistance	1000 MOhms min.
Isolation Capacitance	1000 pF
Switching Frequency	350 kHz
EMI/RFI	Conductive EMI Meets EN55022 Class A
Operating Ambient Temperature Range	-40°C to +85°C
Derating, above +78°C	Linearly to Zero Power at +105°C
Case Temperature <sup>1)</sup>	+105°C max.
Storage Temperature Range	-55°C to +125°C
Cooling	Natural Convection
Humidity	95% RH max. Non Condensing
MTBF (MIL-STD-217F, GB, 25°C, Full Load)	1200 khrs
Case Grounding	Connect Case to -Vin with Decoupling Y Cap
Dimensions	2.00 x 1.00 x 0.40 Inches (50.8 x 25.4 x 10.16 mm)
Case Material	Black Coated Copper with Non-Conductive Base
Weight	35.0 g

## NOTE:

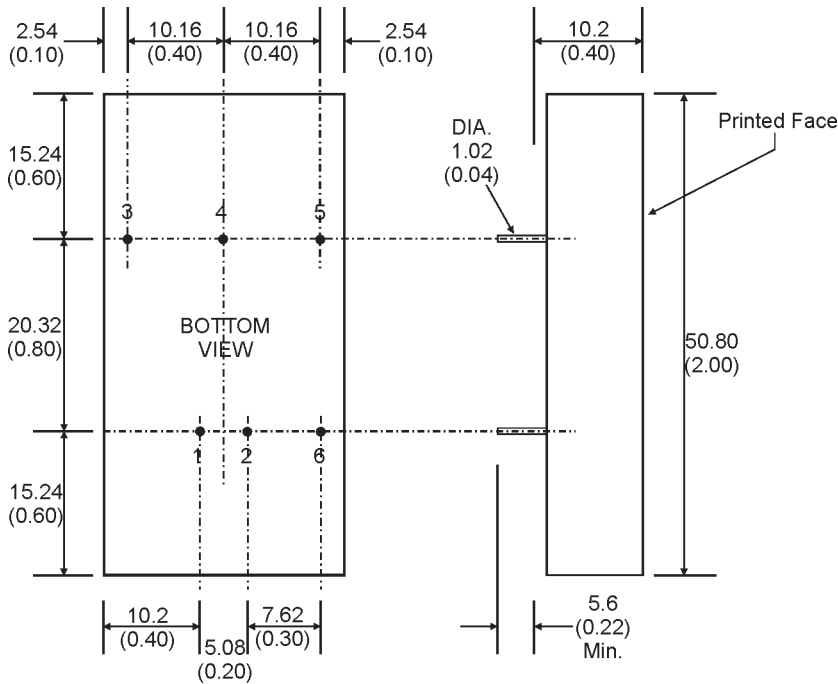
1. Maximum case temperature under any operating condition should not be exceeded +105°C.

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**MECHANICAL SPECIFICATIONS**

CASE "BU"



PIN CONNECTIONS	
1	+INPUT
2	-INPUT
3	+OUTPUT
4	COMMON/NP/TRIM* (OPTION)
5	-OUTPUT
6	NP/REMOTE CONTROL (OPTION)

\*NP-NO PIN on Single Output

All Dimensions in mm (Inches)  
 Tolerances: Inches x.xx=±0.04, x.xxx=±0.010  
 Millimeters x.x=±1.00, x.xx=±0.25

**DIAGRAMS**

**Derating Curve**

