

BRU SERIES

23~30W DC/DC CONVERTERS Single Output



H8.5×W50×L55 (mm)

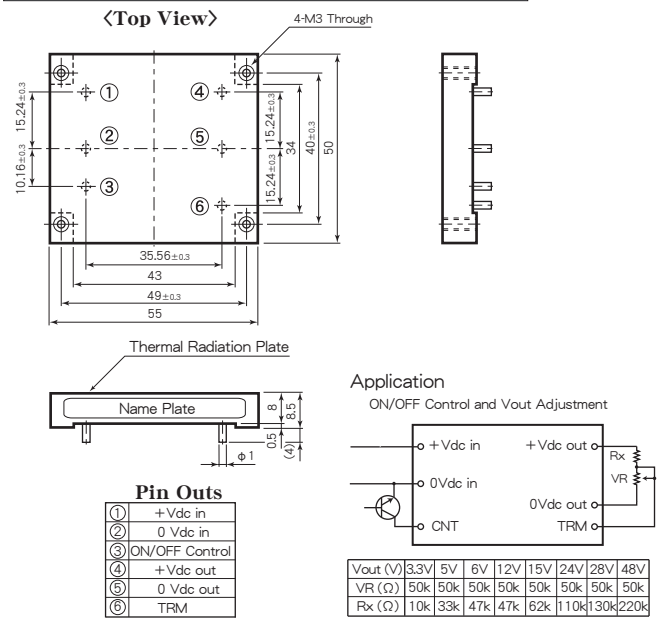
Features

- Low Profile 8.5mm
- 薄型 8.5mm
- Built-in Input Filter
- 入力フィルタ内蔵
- Input-Output Isolation (AC2000V)
- 入出力間絶縁 (AC2000V)
- High Efficiency 87~90%
- 高効率 87~90%
- Wide Input Voltage Range
- 広範囲な入力電圧
- High Reliability
- 高信頼性
- 6 Sided Metal Shielding
- 6面メタルシールド
- Remote ON/OFF Control
- リモートON/OFFコントロール
- Adjustable Output Volt. ±5%
- 可変出力電圧 ±5%
- Input Low Voltage Protection
- 入力低電圧保護回路内蔵
- Input Over Voltage Protection
- 入力過電圧保護回路内蔵
- Output Over Voltage Protection
- 出力過電圧保護回路内蔵
- 115~140% Operation
- 115~140% 動作
- Thermal Protection
- 過熱保護回路内蔵
- +110°C~+120°C
- +110°C~+120°C
- Operating Ambient Temperature
- 動作周囲温度
- 40°C~+85°C
- 40°C~+85°C
- Max. Case Temperature
- 最大ケース温度
- +105°C
- +105°C
- Conformity to RoHS Directive
- RoHS指令対応
- Not built-in aluminum and tantalum electrolytic capacitor
- アルミ電解コンデンサ及びタンタルコンデンサ不使用

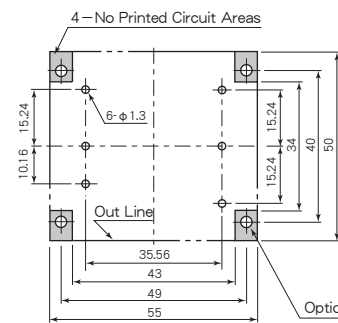
General Characteristics

- Input Voltage, Range
DC12, 24, 48, 100V (See Table 1)
- Output Voltage, Current
See Table 1
- Output Voltage Accuracy
±2%
±3% (3.3, 5, 6V Vout only)
±5% (Used trimmer)
- Output Voltage Range
See Table 1
- Efficiency
±0.3% max. (at Vin Range)
±0.5% max. (0~100% Load)
(3% Vin)Vp-p max.
40mVp-p max.
100mVp-p max. (48V Vout only)
- Output Noise
100mVp-p max.
200mVp-p max. (48V Vout only)
- Short Circuit Protection
Built-in, Auto-restart (See Fig. 2)
- Over Voltage Protection
115~140% Output Voltage
ON : Short or 0~0.8V
OFF : Open or 2~10V
(Between pin ② ~ ③)
- Remote ON/OFF Control
- Temperature Coefficient
0.02%/°C max.
- Operating Ambient Temp.
-40°C~+85°C (See Fig. 1)
- Max. Case Temperature
+105°C
- Storage Temperature
-50°C~+115°C
- Isolation Voltage
AC2000V one minute
(Input-Output-Case)
- Isolation Impedance
100MΩ min. (at DC1000V)
(Input-Output-Case)
- Weight
Main Body : 60g max.
Heat Sink : 40g max.
- Humidity
20~95% RH
- Shock
490m/s² (11msec 3directions)
- Vibration
10~55Hz 98m/s²
(30minutes 3directions)
- Surface Structure
6 Sided Aluminum Case
- Soldering Conditions
Soldering DIP
Soldering iron
260°C, for 15 seconds max.
360°C, for 5 seconds max.
- MTBF
500,000H
(Ta : 25°C, 80% Load, Nominal Vin)
- Warranty
5 years

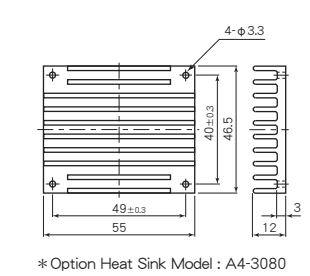
Pin Outs & Dimensions (±0.5mm)



Holes on PCB (Top View)



Option Heat Sink



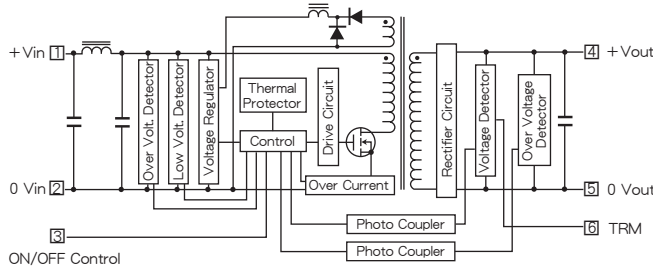
Selection Guide

Model Number	Input Volt. (Range) (V. DC)	Output Voltage (V. DC)	Output Current (A)	Efficiency (Typical)(%)		
				20% Load	80% Load	
BRU12-3.3S 7A	12 (8~18)	3.3	7	84	87	
BRU12-5S 6A		5	6	84	90	
BRU12-6S 5A		6	5	84	90	
BRU12-1.2S 2.5A		12	2.5	84	90	
BRU12-1.5S 2A		15	2	84	90	
BRU12-2.4S 1.25A		24	1.25	84	90	
BRU12-2.8S 1.07A		28	1.07	84	90	
BRU12-4.8S 0.6A		48	0.6	84	90	
BRU24-3.3S 7A		24 (16~36)	3.3	7	84	87
BRU24-5S 6A			5	6	84	90
BRU24-6S 5A	6		5	84	90	
BRU24-1.2S 2.5A	12		2.5	84	90	
BRU24-1.5S 2A	15		2	84	90	
BRU24-2.4S 1.25A	24		1.25	84	90	
BRU24-2.8S 1.07A	28	1.07	84	90		
BRU24-4.8S 0.6A	48	0.6	84	90		
BRU48-3.3S 7A	48 (32~76)	3.3	7	84	87	
BRU48-5S 6A		5	6	84	90	
BRU48-6S 5A		6	5	84	90	
BRU48-1.2S 2.5A		12	2.5	84	90	
BRU48-1.5S 2A		15	2	84	90	
BRU48-2.4S 1.25A		24	1.25	84	90	
BRU48-2.8S 1.07A		28	1.07	84	90	
BRU100-3.3S 7A		100 (64~144)	3.3	7	84	87
BRU100-5S 6A	5		6	84	90	
BRU100-6S 5A	6		5	84	90	
BRU100-1.2S 2.5A	12		2.5	84	90	
BRU100-1.5S 2A	15		2	84	90	
BRU100-2.4S 1.25A	24		1.25	84	90	
BRU100-2.8S 1.07A	28		1.07	84	90	

* 上記仕様以外にも対応可能ですのでお問い合わせ下さい。
Please consult with us about other specification.

BRU SERIES DATA SHEET

Block Diagram



Characteristic Curves

Fig. 1 Derating Curve

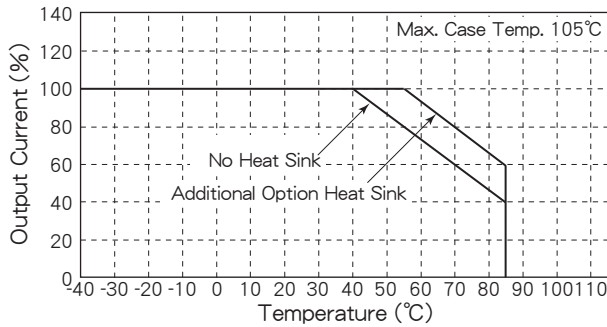


Fig. 2 Short Circuit Operating Area

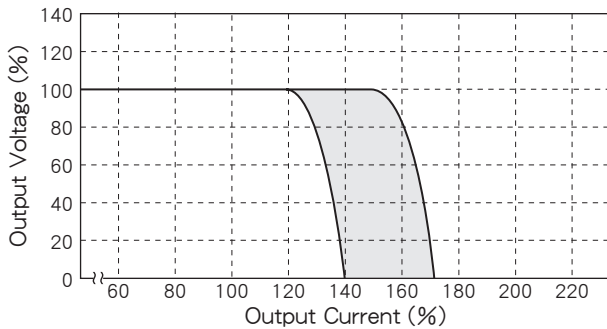


Fig. 3 Temperature Characteristic on Case Surface

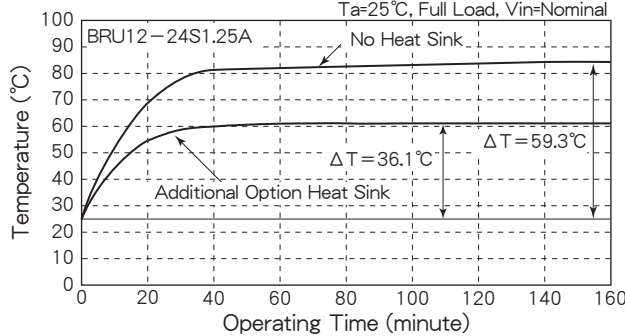


Fig. 4 Efficiency vs. Output Current (Vin=12V)

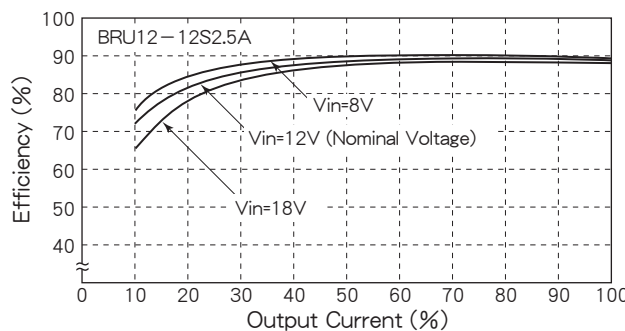


Fig. 5 Efficiency vs. Output Current (Vin=12V)

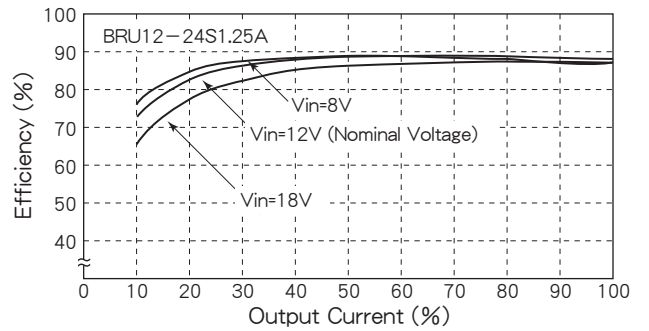


Fig. 6 Efficiency vs. Output Current (Vin=24V)

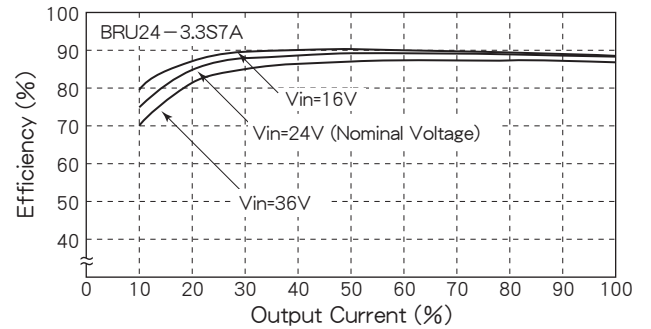


Fig. 7 Efficiency vs. Output Current (Vin=24V)

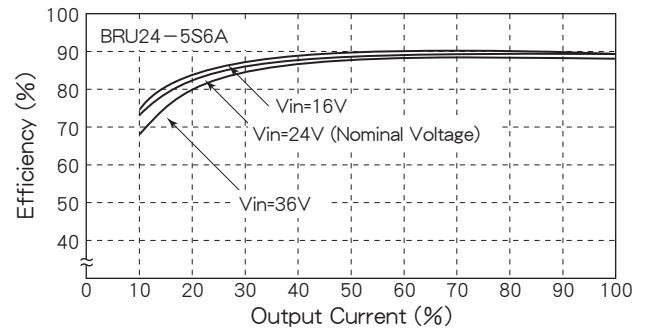


Fig. 8 Efficiency vs. Output Current (Vin=48V)

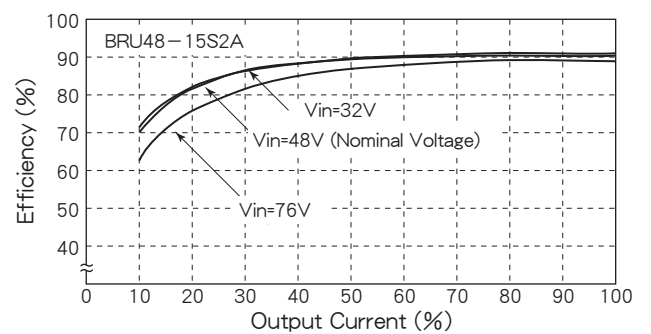


Fig. 9 Efficiency vs. Output Current (Vin=100V)

