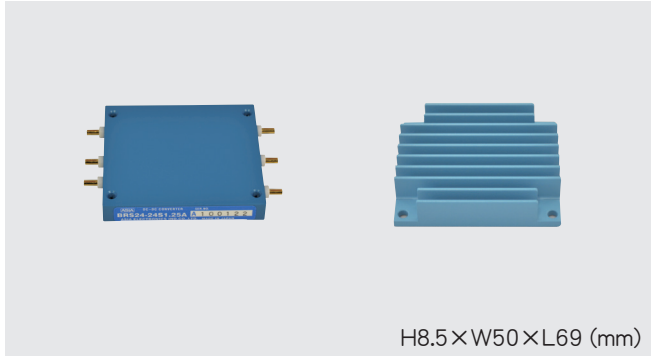


BRS SERIES

20~30W DC/DC CONVERTERS Single Output



H8.5×W50×L69 (mm)

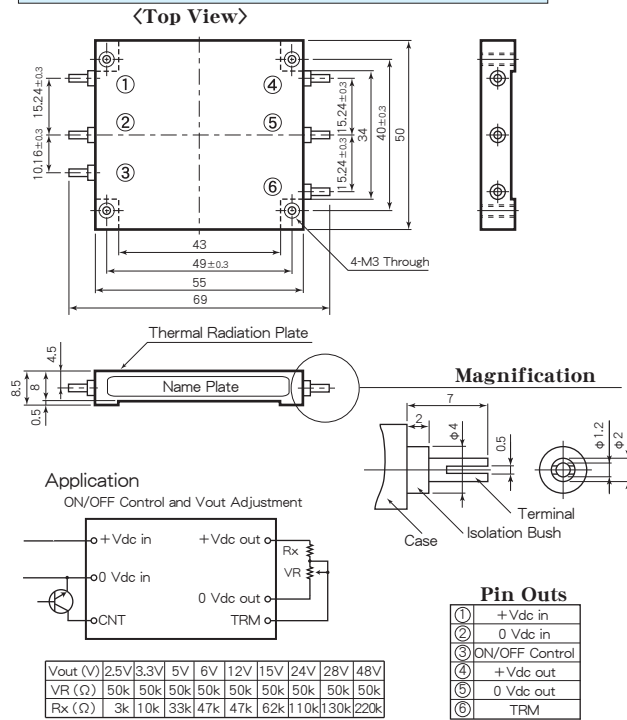
Features

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

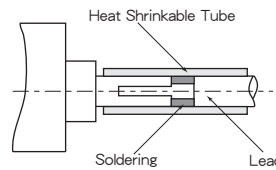
General Characteristics

- Input Voltage, Range DC 12, 24, 48, 100V (See Table 1)
- Output Voltage, Current ±2% (12V, 15V, 24V, 28V, 48V Vout) ±3% (2.5V, 3.3V, 5V, 6V Vout)
- Output Voltage Accuracy ±5% (Used trimmer)
- Output Adjustment Range See Table 1
- Efficiency ±0.3% max. (at Vin Range)
- Line Regulation ±0.5% max. (0~100% Load)
- Load Regulation (3% Vin) Vp-p max.
- Reflected Input Ripple, Noise 40mVp-p max. (48V Vout : 100mVp-p max.)
- Output Ripple 100mVp-p max. (48V Vout : 200mVp-p max.)
- Output Noise
- Short Circuit Protection Built-in, Auto-restart (See Fig 2)
- Over Voltage Protection 115~140% Output Voltage
- Remote ON/OFF Control ON : Short or 0~0.8V OFF : Open or 2~10V (Between pin ② ~ ③)
- 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
- MTBF 500,000H (Ta:25°C, 80%Load, Nominal Vin)
- Warranty 5 years

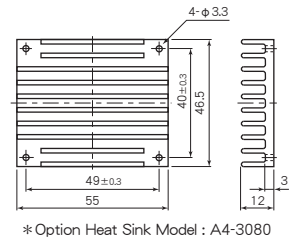
Pin Outs & Dimensions (±0.5mm)



Soldering Method



Option Heat Sink



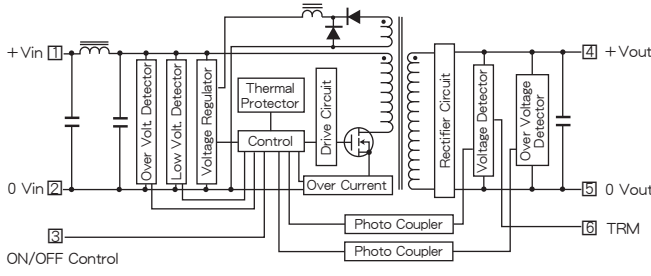
Selection Guide

Model Number	Input Volt. (Range) (V. DC)	Output Voltage (V. DC)	Output Current (A)	Efficiency (Typical)(%)		
				20% Load	80% Load	
BRS12-2.5S 8A	12 (8~18)	2.5	8	82	85	
BRS12-3.3S 7A		3.3	7	84	87	
BRS12-5S 6A		5	6	84	90	
BRS12-6S 5A		6	5	84	90	
BRS12-12S 2.5A		12	2.5	84	90	
BRS12-15S 2A		15	2	84	90	
BRS12-24S 1.25A		24	1.25	84	90	
BRS12-28S 1.07A		28	1.07	84	90	
BRS12-48S 0.6A		48	0.6	84	90	
BRS24-2.5S 8A		24 (16~36)	2.5	8	82	85
BRS24-3.3S 7A	3.3		7	84	87	
BRS24-5S 6A	5		6	84	90	
BRS24-6S 5A	6		5	84	90	
BRS24-12S 2.5A	12		2.5	84	90	
BRS24-15S 2A	15		2	84	90	
BRS24-24S 1.25A	24		1.25	84	90	
BRS24-28S 1.07A	28		1.07	84	90	
BRS24-48S 0.6A	48		0.6	84	90	
BRS48-2.5S 8A	48 (32~76)		2.5	8	82	85
BRS48-3.3S 7A		3.3	7	84	87	
BRS48-5S 6A		5	6	84	90	
BRS48-6S 5A		6	5	84	90	
BRS48-12S 2.5A		12	2.5	84	90	
BRS48-15S 2A		15	2	84	90	
BRS48-24S 1.25A		24	1.25	84	90	
BRS48-28S 1.07A		28	1.07	84	90	
BRS100-2.5S 8A		100 (64~144)	2.5	8	82	85
BRS100-3.3S 7A			3.3	7	84	87
BRS100-5S 6A	5		6	84	90	
BRS100-6S 5A	6		5	84	90	
BRS100-12S 2.5A	12		2.5	84	90	
BRS100-15S 2A	15		2	84	90	
BRS100-24S 1.25A	24		1.25	84	90	
BRS100-28S 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.

BRS SERIES DATA SHEET

Block Diagram



Characteristic Curves

Fig 1 Derating Curve

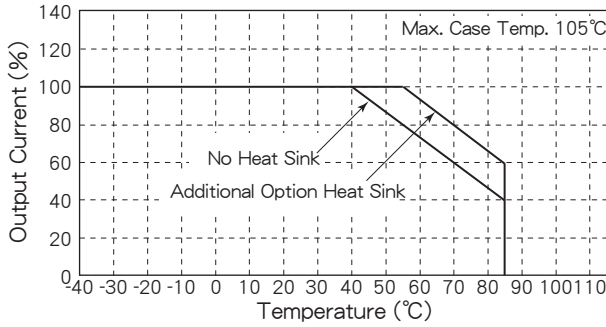


Fig 2 Short Circuit Operating Area

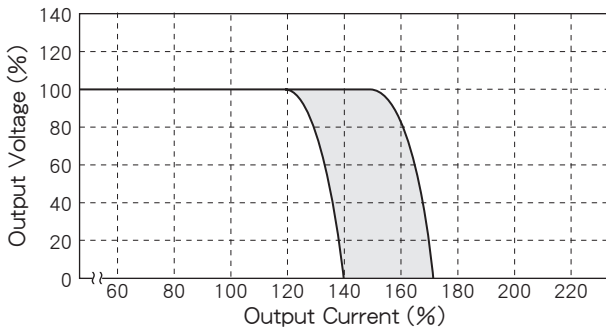


Fig 3 Temperature Characteristic on Case Surface

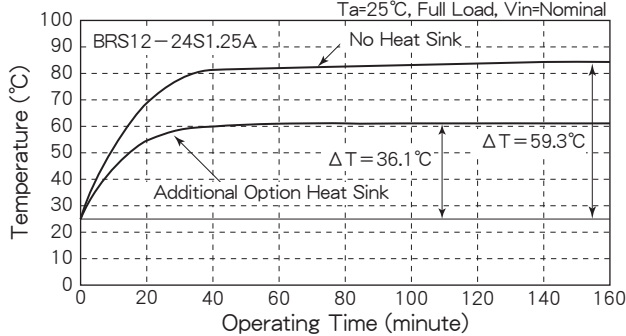


Fig 4 Efficiency vs. Output Current (Vin=12V)

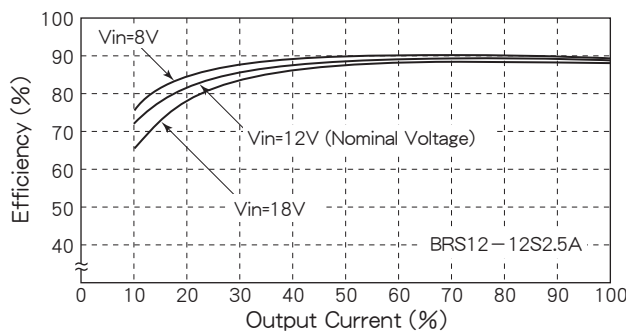


Fig 5 Efficiency vs. Output Current (Vin=12V)

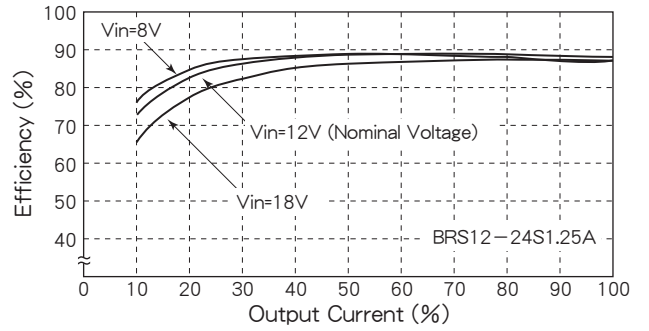


Fig 6 Efficiency vs. Output Current (Vin=24V)

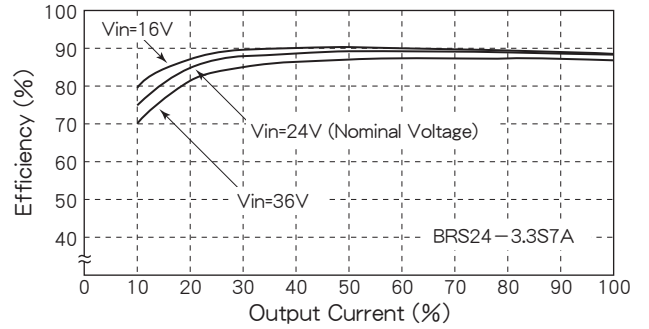


Fig 7 Efficiency vs. Output Current (Vin=24V)

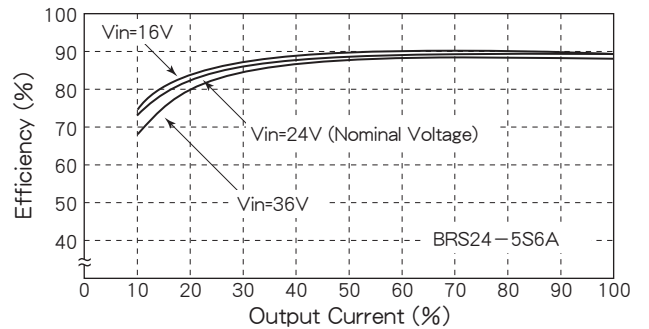


Fig 8 Efficiency vs. Output Current (Vin=48V)

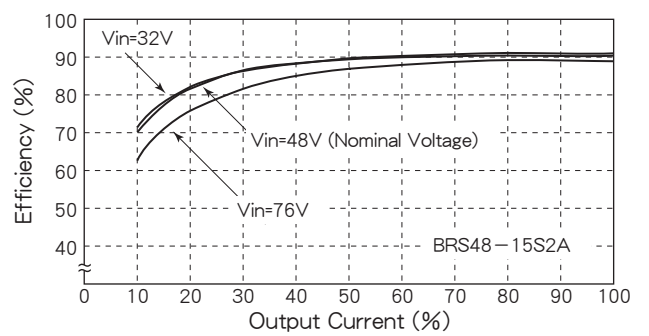


Fig 9 Efficiency vs. Output Current (Vin=100V)

