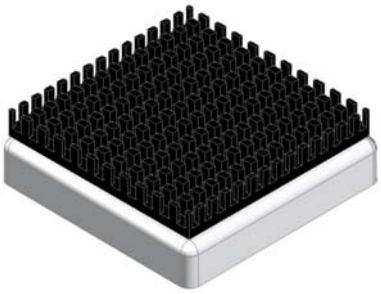
PRELIMINARY

BOTHHAND ENTERPRISE INC.

DC-DC Converters
BWC60-24S2W -- 60Watt

Features

- Wide 4 : 1 Input Voltage Range(9~36V)
- High Efficiency up to 88%
- Output Short Circuit Protection: Hiccup, Continuous & Auto Recovery
- Over Temperature Protection
- Adjustable Output Voltage: ±10%
- Optional Heat-sink



RoHS compliant

Technical Specification

All specifications are typical at nominal input, full load and 25°C unless otherwise stated.

Model Number	Input Voltage Range	Output Voltage (Vdc)	Output Current (mA)		Input Current (mA)		Eff .(1) (%)	Capacitive Load, max. (uF)
			Min. Load	Full. Load	No Load	Full Load		
BWC60-24S2W	9~36V Nominal: 24Vdc	12	0	5000	100	2976	88	------

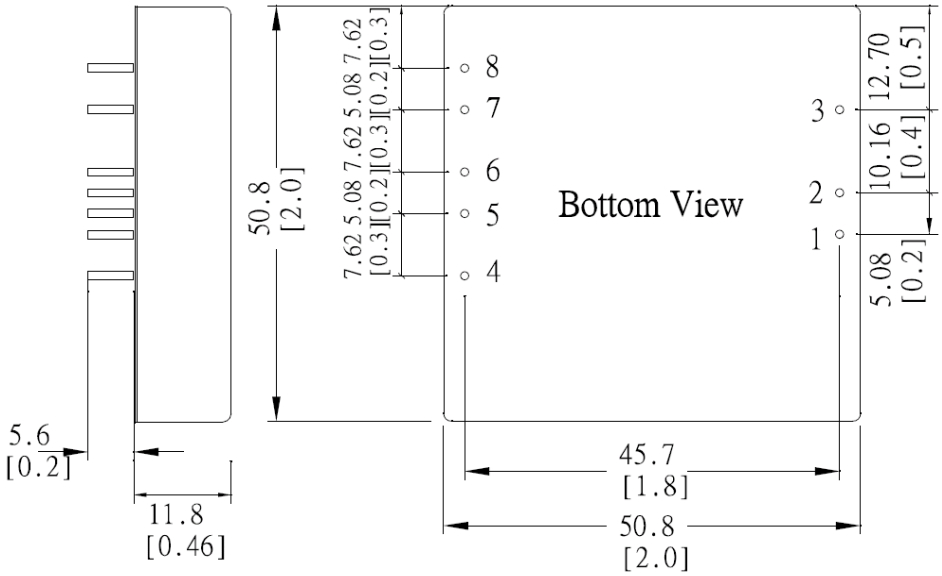
Input Specifications		
Input voltage	24V nominal input	9-36Vdc
Input filter		Pi type
Input surge voltage (100ms max.)	24V nominal input	50Vdc
Remote ON/OFF	Converter: ON	Open or 3.5V＜Vr＜12V
	Converter: OFF	Short (2) or 0V＜Vr＜0.7V
Sourcing current of remote control pin	Nominal Vin	＜0.2 mA
Idle input current (at Remote OFF state)	Nominal Vin	＜20 mA
Environmental Specifications		
Operating ambient temperature		-40°C to +85°C (with derating)
Maximum case temperature		+100°C
Storage temperature range		-55°C to +105°C
Relative humidity		95% RH max.
Temperature coefficient		±0.02% / °C max.
Output Specifications		
Output power		60 Watts max.
Voltage accuracy	Full load and nominal Vin	±1%
Line regulation	LL to HL at full load	±0.2%
Load Regulation	25% load to full load	±0.5%
Ripple and Noise (20MHz Bandwidth)		50mVp-p max.
Over voltage protection	12Vout models	15V
Capacitive load		See table
Over load protection	% of full load at nominal input	110% min.
Thermal shutdown		115°C typ.

Short circuit protection		Hiccup, automatic recovery
Transient response settling time	50% load step change	300μs typ.
Transient response over shoot	di/dt=0.8A/μs	≤ ±5% of Vo
General Specifications		
Efficiency	Nominal input	See table
Isolation voltage	Input to output	1500Vdc
Isolation resistance	500Vdc	10^9 Ohms min.
Isolation capacitance		1200pF typ.
Switching frequency		300kHz typ.
Reliability, calculated MTBF		8.88×10^5 Hrs
Physical Specifications		
Case material		Nickel-coated copper
Base material		FR4 PCB
Potting material		Silicon rubber (UL94 V-0)
Dimensions		2.00 × 2.00 × 0.46 Inch (50.8 × 50.8 × 11.8 mm)
Weight		N/A

Note

1. Typical value, tested at nominal input and full load.
2. Short to -Vin (Pin 2).
3. Specifications subject to change without notice.

Mechanical Dimensions



Pin Assignment	
Pin	Single
1	+Vin
2	-Vin
3	Remote On/Off
4	-Sense
5	+Sense
6	+Vout
7	-Vout
8	Trim

Unit: mm [inch]
Tolerance:±0.5[±0.02]

Heat-sink

Material: Aluminum

Weight: 19g (0.67oz) (without converter)

Note:
The product label on converter has to be removed before mounting the heat-sink.
For volume orders, converters will be supplied with heat-sink already mounted. Please contact factory for quotation.