

KEY FEATURES

- Power Module for PCB Mountable
- 4:1 Wide Input Range
- Regulated Output
- Low Ripple and Noise
- 3-Years Product Warranty

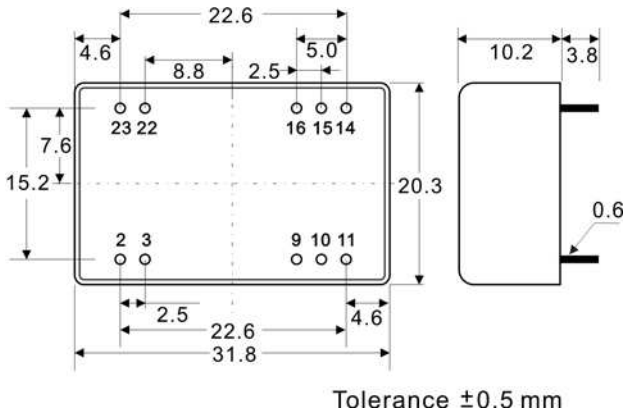

ELECTRICAL SPECIFICATIONS

Model No.	SB03-24-3.3S	SB03-24-5S	SB03-24-12S	SB03-24-15S	SB03-24-24S	SB03-24-5D	SB03-24-12D	SB03-24-15D
Max. Output Wattage (W)	3W	3.3W	4W	4W	4W	3W	4W	4W
Input Voltage (V.DC.) (Note 3)	24V (9-36V)	24V (9-36V)	24V (9-36V)	24V (9-36V)	24V (9-36V)	24V (9-36V)	24V (9-36V)	24V (9-36V)
Output Voltage (V.DC.)	3.3V / 900mA	5V / 660mA	12V / 330mA	15V / 267mA	24V / 166mA	±5V / ±300mA	±12V / ±166mA	±15V / ±133mA
Efficiency (at 12V.DC)	69%	72%	78%	76%	76%	73%	77%	75%

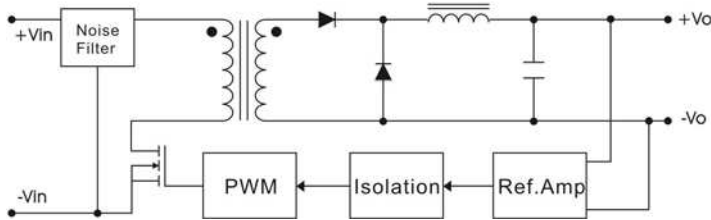
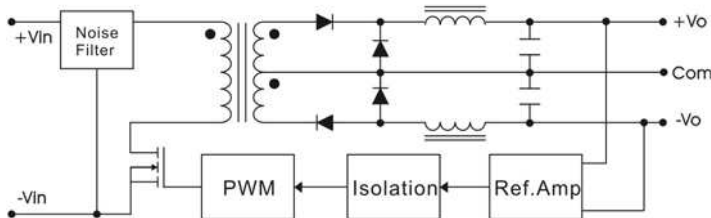
Model No.	SB03-48-3.3S	SB03-48-5S	SB03-48-12S	SB03-48-15S	SB03-48-24S	SB03-48-5D	SB03-48-12D	SB03-48-15D
Max. Output Wattage (W)	3W	3.3W	4W	4W	4W	3W	4W	4W
Input Voltage (V.DC.) (Note 3)	48V (18-75V)	48V (18-75V)	48V (18-75V)	48V (18-75V)	48V (18-75V)	48V (18-75V)	48V (18-75V)	48V (18-75V)
Output Voltage (V.DC.)	3.3V / 900mA	5V / 660mA	12V / 330mA	15V / 267mA	24V / 166mA	±5V / ±300mA	±12V / ±166mA	±15V / ±133mA
Efficiency (at 24V.DC)	68%	71%	77%	76%	76%	75%	79%	78%

Model No.	SB03-24-3.3S SB03-48-3.3S	SB03-24-5S SB03-48-5S	SB03-24-12S SB03-48-12S	SB03-24-15S SB03-48-15S	SB03-24-24S SB03-48-24S	SB03-24-5D SB03-48-5D	SB03-24-12D SB03-48-12D	SB03-24-15D SB03-48-15D	
Max Output Wattage (W)	3W	3.3W	4W	4W	4W	3W	4W	4W	
Input	Input Filter π type								
Output	Voltage (V.DC.)	3.3	5	12	15	24	±5	±12	±15
	Voltage Accuracy	±2%							
	Current (mA) max	900	660	330	267	166	±300	±166	±133
	Line Regulation (LL-HL) (typ.)	±0.5%							
	Load Regulation (10-100%) (typ.)	±3%	±1%	±1%	±1%	±1%	±1%	±1%	±1%
	Ripple	<0.2% Vout +40mV max (Vp-p)							
	Noise	<0.5% Vout +50mV max (Vp-p)							
Switching Frequency	300KHz								
Protection	Over Power Protection	Works over 120% of rating and recovers automatically.							
	Short Circuit Protection	Current limit, auto-recovery							
Isolation	Voltage	1600 VDC.							
	Resistance	10 ⁸ ohms							
	Capacitance	1000 pF							
Environment	Operating Temperature	-25°C...+70°C (at Full Load)							
	Storage Temperature	-55°C...+105°C							
	Case Temperature	+100°C max.							
	Temperature Coefficient	±0.02% Per°C							
	Humidity	95% RH							
	MTBF	>800,000 h @ 25°C (MIL-HDBK-217F)							
Physical	Dimension (L x W x H)	1.25 x 0.8 x 0.4 Inches (31.8 x 20.3 x 10.2 mm) Tolerance ±0.5 mm							
	Case Material	Five-side shielded Aluminum with Non-Conductive base, Black Anodize							
	Weight	20 g							
	Cooling Method	Free-air convection							

- 1.All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.
- 2.Ripple & Noise are measured at 20MHz of bandwidth with 0.1 μ F & 47 μ F parallel capacitor.
- 3.If Input Voltage <10 VDC needs 1% Minimum Load.

MECHANICAL DIMENSION (Top View)


PIN#	Single	Dual
2	-VIN	-VIN
3	-VIN	-VIN
9	NC	COMMON
10	NC	NC
11	NC	-VOUT
14	+VOUT	+VOUT
15	NC	NC
16	-VOUT	COMMON
22	+VIN	+VIN
23	+VIN	+VIN

BLOCK DIAGRAM
Single Output

Dual Output

DERATING
