

KEY FEATURES

- Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Regulated Output
- Low Ripple and Noise
- 2-Years Product Warranty


ELECTRICAL SPECIFICATIONS

Model No.	SB1R5-5-5S	SB1R5-5-12S	SB1R5-5-15S	SB1R5-5-24S	SB1R5-5-5D	SB1R5-5-12D	SB1R5-5-15D
Max. Output Wattage (W)	1.5W	1.5W	1.5W	1.5W	1.5W	1.44W	1.5W
Input Voltage (V.DC.)	5V (4.5-5.5)	5V (4.5-5.5)	5V (4.5-5.5)	5V (4.5-5.5)	5V (4.5-5.5)	5V (4.5-5.5)	5V (4.5-5.5)
Output Voltage (V.DC.)	5V / 300mA	12V / 125mA	15V / 100mA	24V / 63mA	±5V / ±150mA	±12V / ±60mA	±15V / ±50mA
Efficiency	60%	54%	56%	58%	57%	59%	61%

Model No.	SB1R5-12-5S	SB1R5-12-12S	SB1R5-12-15S	SB1R5-12-24S	SB1R5-12-5D	SB1R5-12-12D	SB1R5-12-15D
Max. Output Wattage (W)	1.5W	1.5W	1.5W	1.5W	1.5W	1.44W	1.5W
Input Voltage (V.DC.)	12V (10.8-13.2)	12V (10.8-13.2)	12V (10.8-13.2)	12V (10.8-13.2)	12V (10.8-13.2)	12V (10.8-13.2)	12V (10.8-13.2)
Output Voltage (V.DC.)	5V / 300mA	12V / 125mA	15V / 100mA	24V / 63mA	±5V / ±150mA	±12V / ±60mA	±15V / ±50mA
Efficiency	65%	60%	62%	64%	60%	61%	65%

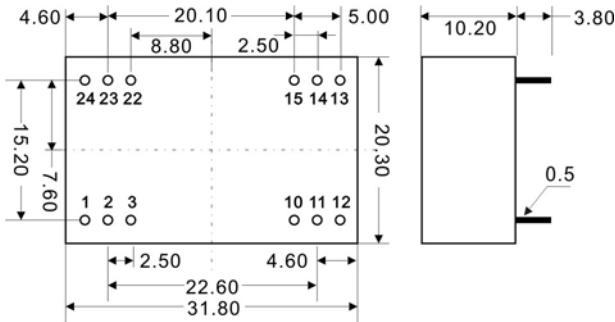
Model No.	SB1R5-24-5S	SB1R5-24-12S	SB1R5-24-15S	SB1R5-24-24S	SB1R5-24-5D	SB1R5-24-12D	SB1R5-24-15D
Max. Output Wattage (W)	1.5W	1.5W	1.5W	1.5W	1.5W	1.44W	1.5W
Input Voltage (V.DC.)	24V (21.6-26.4)	24V (21.6-26.4)	24V (21.6-26.4)	24V (21.6-26.4)	24V (21.6-26.4)	24V (21.6-26.4)	24V (21.6-26.4)
Output Voltage (V.DC.)	5V / 300mA	12V / 125mA	15V / 100mA	24V / 63mA	±5V / ±150mA	±12V / ±60mA	±15V / ±50mA
Efficiency	57%	55%	55%	58%	54%	54%	56%

Model No.	SB1R5-48-5S	SB1R5-48-12S	SB1R5-48-15S	SB1R5-48-24S	SB1R5-48-5D	SB1R5-48-12D	SB1R5-48-15D
Max. Output Wattage (W)	1.5W	1.5W	1.5W	1.5W	1.5W	1.44W	1.5W
Input Voltage (V.DC.)	48V (43.2-52.8)	48V (43.2-52.8)	48V (43.2-52.8)	48V (43.2-52.8)	48V (43.2-52.8)	48V (43.2-52.8)	48V (43.2-52.8)
Output Voltage (V.DC.)	5V / 300mA	12V / 125mA	15V / 100mA	24V / 63mA	±5V / ±150mA	±12V / ±60mA	±15V / ±50mA
Efficiency	53%	52%	51%	54%	52%	54%	54%

Model No.	SB1R5-5-5S		SB1R5-5-12S		SB1R5-5-15S		SB1R5-5-24S		SB1R5-5-5D		SB1R5-5-12D		SB1R5-5-15D	
	SB1R5-12-5S		SB1R5-12-12S		SB1R5-12-15S		SB1R5-12-24S		SB1R5-12-5D		SB1R5-12-12D		SB1R5-12-15D	
	SB1R5-24-5S		SB1R5-24-12S		SB1R5-24-15S		SB1R5-24-24S		SB1R5-24-5D		SB1R5-24-12D		SB1R5-24-15D	
	SB1R5-48-5S		SB1R5-48-12S		SB1R5-48-15S		SB1R5-48-24S		SB1R5-48-5D		SB1R5-48-12D		SB1R5-48-15D	
Max Output Wattage (W)	1.5W		1.5W		1.5W		1.5W		1.5W		1.44W		1.5W	
Input	Input Filter	π type												
	Voltage (V.DC.)	5	12	15	24	±5	±12	±15						
Output	Voltage Accuracy	±3%												
	Current (mA) max	300	125	100	63	±150	±60	±50						
	Line Regulation (LL-HL) (typ.)	±0.3%												
	Load Regulation (10-100%) (typ.)	±0.5%												
	Ripple	<0.2% Vout +10mV max (Vp-p)												
	Noise	<0.5% Vout +30mV max (Vp-p)												
	Switching Frequency	20KHz												
Protection	Over Power Protection	Works over 120% of rating and recovers automatically.												
	Short Circuit Protection	Current limit, auto-recovery												
Isolation	Voltage	500 VDC.												
	Resistance	10 ⁸ ohms												
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	>1,000,000 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	Plastic												
	Weight	13 g												
	Cooling Method	Free-air convection												

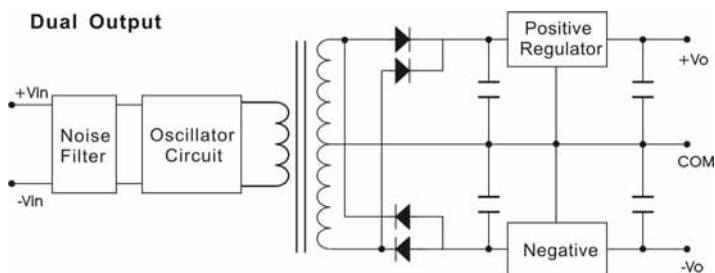
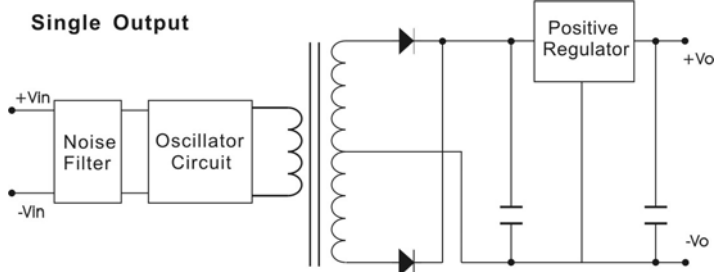
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

MECHANICAL DIMENSION (Top View)



PIN#	Single	Dual
1	+VIN	+VIN
2	NC	-VOUT
3	NO PIN	COMMON
10	-VOUT	COMMON
11	+VOUT	+VOUT
12	-VIN	-VIN
13	-VIN	-VIN
14	+VOUT	+VOUT
15	-VOUT	COMMON
22	NO PIN	COMMON
23	NC	-VOUT
24	+VIN	+VIN

BLOCK DIAGRAM



DERATING

