

KEY FEATURES

- Power Modules for PCB Mounting
- Fully Encapsulated Plastic Case
- Regulated Output
- Low Ripple and Noise
- 2-Year 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	±12 / ±60mA	±15 / ±50mA

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	±12 / ±60mA	±15 / ±50mA

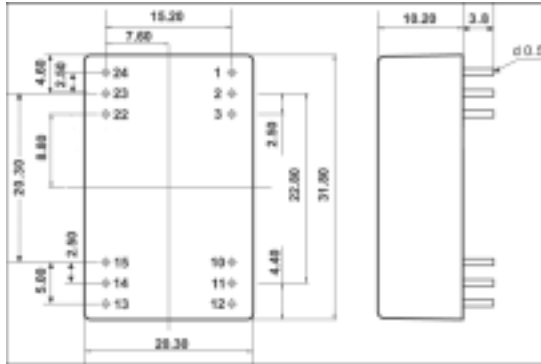
Model No.	SB1R5-24-5S	SB1R5-24-12S	SB1R5-24-15S	SB1R5-24-24S	SB1R5-24-5D	SB1R5-24-12D	SB1R5-24-15D
Max. output wattage (W)	1.5W	1.5W	1.5W	1.5W	1.5W	1.44W	1.5W
Input voltage (V.DC.)	24V (21.6-26.4)	24V (21.6-26.4)	24V (21.6-26.4)	24V (21.6-26.4)	24V (21.6-26.4)	24V (21.6-26.4)	24V (21.6-26.4)
Output voltage (V.DC.)	5V / 300mA	12V / 125mA	15V / 100mA	24V / 63mA	±5V / ±150mA	±12 / ±60mA	±15 / ±50mA

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	±12 / ±60mA	±15 / ±50mA

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	Input filter π type							
Output	Voltage (V.DC.)	5	12	15	24	±5	±12	±15
	Voltage accuracy	±3%	±3%	±3%	±3%	±3%	±3%	±3%
	Current (mA) max	300	125	100	63	±150	±60	±50
	Line regulation (HL-LL) (typ.)	±0.3%	±0.3%	±0.3%	±0.3%	±0.3%	±0.3%	±0.3%
	Load regulation (10-100%) (typ.)	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Ripple	<0.2% Vout +10mV max (Vp-p)						
	Noise	<0.5% Vout +30mV max (Vp-p)						
	Efficiency	55%	54%	55%	55%	52%	54%	54%
Switching frequency	20KHz	20KHz	20KHz	20KHz	20KHz	20KHz	20KHz	
Protection	Over current protection	Works over 120% of rating and recovers automatically.						
	Short circuit protection	Current limit, auto-recovery						
Isolation	Voltage	500 VDC.						
	Resistance	10 ⁹ ohms						
Environment	Operating temperature	-25°C...+71°C						
	Storage temperature	-55°C...+105°C						
	Case temperature	+95°C max.						
	Temperature coefficient	±0.02% Per°C						
	Humidity	95% RH						
Physical	MTBF	>1,000,000 h @ 25°C (MIL-HDBK-217F)						
	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							

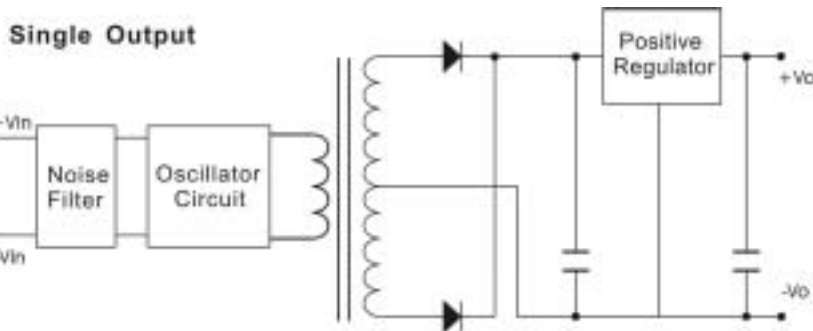
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

MECHANICAL DIMENSION (Bottom 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

