



## DC → DC POWER MODULE

## B SERIES

**B Series** BxxxxS-xW 1KVDC Isolation 0.1W~2W Unregulated single output SIP4 PIN

ISO9001:2008

### Input Volt.

5, 9, 12, 15, 24 VDC

### Output Volt.

3.3, 5, 9, 12, 15, 24 VDC

Other specifications required, please inquire us for details.



### Technical Parameters

All the parameters below are tested at TA=25° C, nominal input voltage, rated output current.

#### Input Parameters

Volt. Range

+/- 10 %

Filter

Ceramic-capacitor

#### Isolation Parameters

Rated Isolation Volt.

1000 VDC

Leak current

<1 m A

Resistance

10<sup>9</sup> Ohm

Capacitor

60 pF TYP.

#### Output Parameters

Volt. Precision

+/- 5 %, max.

( 20 MHz BW) Ripple&Noise

150mV p-p, max.

Continuous short-circuit time

Immediately (<1s)

Linear volt. Calibration

+/- 1,2 % / 1,0 % of Vin

Load volt. Calibration

+/- 8 %, load = 20 ~ 100 %

Temperature index

+/- 0,02 % / °C

#### General Parameters

Efficiency

55% to 85 %

Switching Frequency

60~125 KHz, type.

#### Environmental Parameters

Operating Temp. (environmental)

- 40° C to + 85° C

Storage Temp.

- 55 °C to + 125 °C

Reducing rated value

See temperature derating graph below

Humidity

≤ 90 %, Non-compression

Colling method

Natural Free-air

#### Dimension

SIP Package size

1W : 11.68 x6.0 x10.16 mm    2W : 11.68 x7.0 x10.16 mm  
0.46 x 0.24 x 0.40 inch    0.46 x 0.28 x 0.40 inch

#### Weight

2.5 g~3.5 g

#### External Package Material

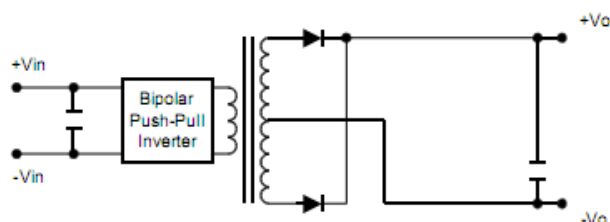
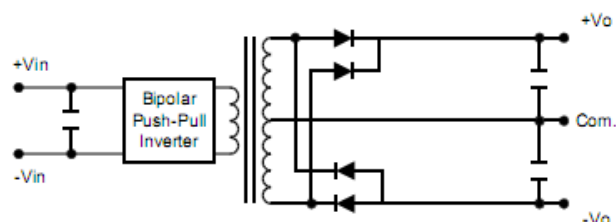
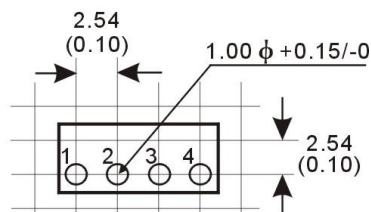
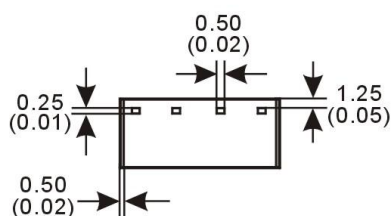
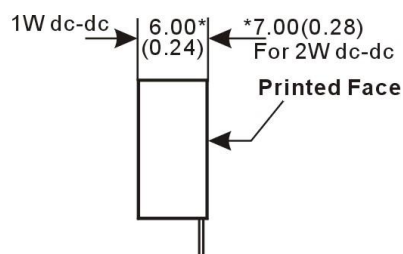
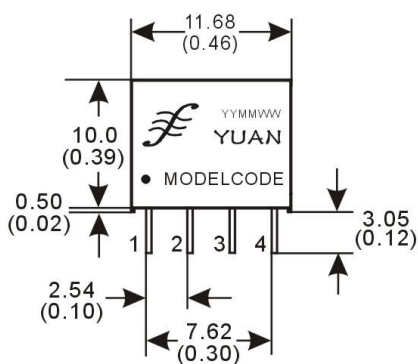
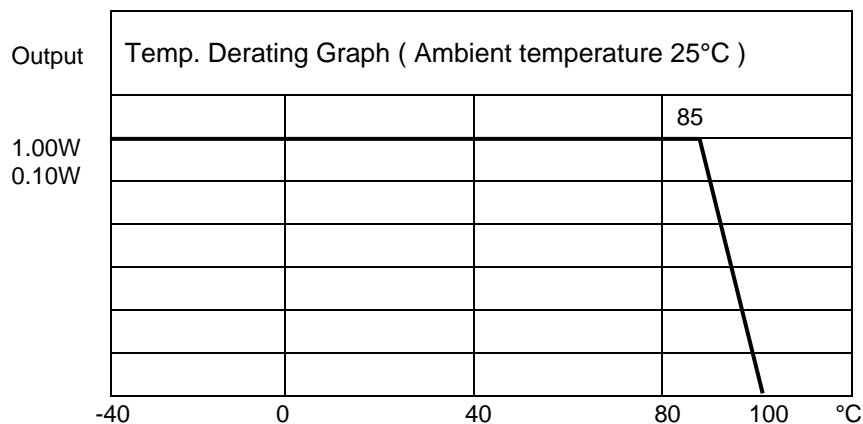
Non-conductive flame-retardant black plastics

#### Typical Product List: (The parameters below are collected at 8 hours full-load aging test.)

Model No.	Input Volt. Vin(VDC)	Input Current Empty load (mA)	Input Current Full load (mA)	Output Volt. Vout(VDC)	Output Current (max.mA)	Efficiency Full load (%TYPE)
B0503S-W1	5	5	34	3.3	30	59
B0505S-W1	5	4	33	5	20	60
B0512S-W1	5	8	32	12	8	60
B1205S-W1	12	5	14	5	20	61
B1212S-W1	12	5	14	12	8	60
B2405S-W1	24	5	7	5	20	60
B2412S-W1	24	5	7	12	8	61
B0505S-W25	5	7	81	5	50	62



Model No.	Input Volt. Vin(VDC)	Input Current Empty load (mA)	Input Current Full load (mA)	Output Volt. Vout(VDC)	Output Current (max.mA)	Efficiency Full load (%TYPE)
B1205S-W25	12	6	34	5	50	62
B1212S-W25	12	5	35	12	21	61
B1215S-W25	12	7	32	15	17	62
B2405S-W25	24	5	17	5	50	62
B2412S-W25	24	4	16	12	21	63
B2415S-W25	24	4	15	15	17	65
B0503S-W5	5	16	167	3.3	150	60
B0505S-W5	5	12	159	5	100	63
B0512S-W5	5	18	154	12	42	65
B1205S-W5	12	11	67	5	100	62
B1212S-W5	12	10	66	12	42	63
B1215S-W5	12	10	63	15	34	66
B2405S-W5	24	6	33	5	100	63
B2412S-W5	24	7	32	12	42	65
B2415S-W5	24	8	27	15	34	66
B0503S-W75	5	22	246	3.3	227	61
B0505S-W75	5	22	238	5	150	63
B0512S-W75	5	14	242	12	63	62
B0515S-W75	5	14	238	15	50	63
B1205S-W75	12	15	100	5	150	62
B1212S-W75	12	12	97	12	63	64
B1215S-W75	12	10	96	15	50	65
B1512S-W75	15	7	79	12	63	63
B0503S-1W	5	28	363	3.3	303	72
B0305S-1W	3.3	38	420	5	200	72
B0505S-1W	5	27	276	5	200	72
B0512S-1W	5	27	254	12	84	70
B1205S-1W	12	13	119	5	200	70
B1212S-1W	12	12	104	12	84	80
B2405S-1W	24	8	55	5	200	75
B2412S-1W	24	7	54	12	84	77
B2415S-1W	24	7	55	15	76	76
B0503S-2W	5	60	571	3.3	606	70
B0505S-2W	5	42	513	5	400	78
B0512S-2W	5	26	500	12	167	80
B1205S-2W	12	22	222	5	400	75
B1212S-2W	12	20	208	12	167	80
B1215S-2W	12	18	214	15	133	78
B2405S-2W	24	8	111	5	400	75
B2412S-2W	24	8	101	12	167	82
B2415S-2W	24	8	98	15	133	85

**Functional Block Diagram:****Single Output****Dual Output****External Dimension & PCB Installation:****SIP 4Pin PCB Size****Temperature Derating Graph and PIN Definition**

Pin	Function		
1	-	Vin	Input -
2	+	Vin	Input +
3	-	Vout	Output -
4	+	Vout	Output +

\* Note: the product design and specification are subject to change without notice.