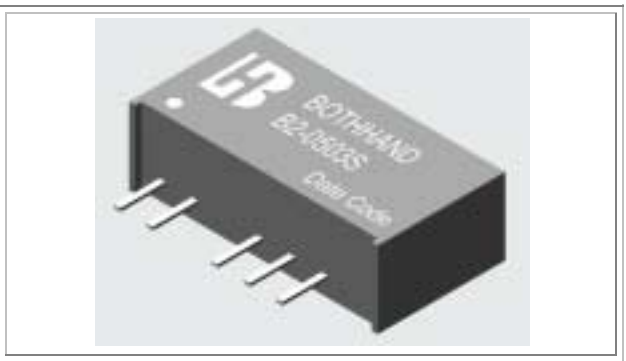


1. Features :

| |
|---|
| ■ 7 Pin SIL Package |
| ■ Low Ripple and Noise |
| ■ Input / Output Isolation 1K Vdc or 3K Vdc |
| ■ 100 % Burn-In |
| ■ Input Filter with Internal Capacitor |
| ■ Custom Design Available |



2. Absolute maximum ratings :

(Exceeding these values may damage the module. These are not continuous operating ratings)

| Parameter | Condition | Min. | Typ. | Max. | Unit |
|-------------------------------------|------------------|------|------|------|--------|
| Input Absolute Voltage Range | 5V Input Model | -0.7 | 5 | 7.5 | Vdc |
| | 12V Input Model | -0.7 | 12 | 15 | |
| | 24V Input Model | -0.7 | 24 | 30 | |
| Max. Output power | | --- | --- | 1 | W |
| Output Short circuit duration | | --- | --- | 1.0 | Second |
| Operating temperature | Output Full Load | -40 | --- | +85 | °C |
| Storage temperature | | -55 | --- | +105 | |

3. Nominal Input / Output Electrical Specifications :

(Specifications typical at Ta = +25°C, nominal input voltage, rated output current unless otherwise noted)

| Parameter | Condition | Min. | Typ. | Max. | Unit |
|-------------------------|-----------------------|------|--------|--------|--------|
| Input Voltage Range | 5V Input Model | 4.5 | 5 | 5.5 | Vdc |
| | 12V Input Model | 10.8 | 12 | 13.2 | |
| | 24V Input Model | 21.6 | 24 | 26.4 | |
| Output Voltage Accuracy | Nominal Input | --- | --- | ± 1.0 | % |
| Output Voltage Balance | Dual Output same Load | --- | --- | ± 0.3 | |
| Switching Frequency | Nominal Input | --- | 100 | --- | KHz |
| Temperature Coefficient | | --- | ± 0.01 | ± 0.02 | % / °C |
| Isolation Voltage | Standard Series | 1000 | --- | --- | Vdc |
| | High Isolation Series | 3000 | --- | --- | |
| Isolation Resistance | 500 Vdc | 1000 | --- | --- | MΩ |
| Isolation Capacitance | 1 KHz / 250 mV rms | --- | 40 | --- | pF |
| Line Regulation | | --- | --- | ± 0.4 | % |

4. Model Selection Guide :

4.1. 1K Vdc Isolation – Dual split output

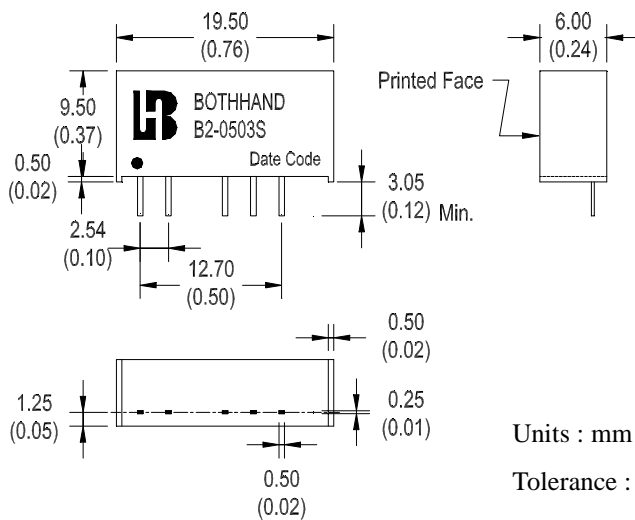
(Specifications typical at Ta = +25 °C, Nominal input voltage, Rated output current unless otherwise noted)

| Bothhand Model No. | Input Voltage (Vdc) | Output Voltage (Vdc) | | Output Current (mA) Max. | | Input Current @ No Load (mA) Typ. | Input Current @ Max. Load (mA) Typ. | Output Ripple (mV) Max. | Load Regulation (%) Max. | Efficiency (%) Typ. |
|--------------------|---------------------|----------------------|------|--------------------------|-----|-----------------------------------|-------------------------------------|-------------------------|--------------------------|---------------------|
| | | Vo1 | Vo2 | Io1 | Io2 | | | | | |
| B2-0503S | 5 | 3.0 | 3.0 | 100 | 100 | 28 | 226 | 45 | ± 0.3 | 53 |
| B2-053R3S | | 3.3 | 3.3 | 100 | 100 | 28 | 249 | 45 | ± 0.3 | 53 |
| B2-054R8S | | 4.85 | 4.85 | 100 | 100 | 28 | 359 | 45 | ± 0.3 | 54 |
| B2-0505S | | 5.0 | 5.0 | 100 | 100 | 28 | 370 | 45 | ± 0.3 | 54 |
| B2-1203S | 12 | 3.0 | 3.0 | 100 | 100 | 18 | 93 | 45 | ± 0.3 | 54 |
| B2-123R3S | | 3.3 | 3.3 | 100 | 100 | 18 | 102 | 45 | ± 0.3 | 54 |
| B2-124R8S | | 4.85 | 4.85 | 100 | 100 | 18 | 147 | 45 | ± 0.3 | 55 |
| B2-1205S | | 5.0 | 5.0 | 100 | 100 | 18 | 152 | 45 | ± 0.3 | 55 |
| B2-2403S | 24 | 3.0 | 3.0 | 100 | 100 | 5 | 46 | 45 | ± 0.3 | 54 |
| B2-243R3S | | 3.3 | 3.3 | 100 | 100 | 5 | 51 | 45 | ± 0.3 | 54 |
| B2-244R8S | | 4.85 | 4.85 | 100 | 100 | 5 | 73 | 45 | ± 0.3 | 55 |
| B2-2405S | | 5.0 | 5.0 | 100 | 100 | 5 | 76 | 45 | ± 0.3 | 55 |
| B2-xxxxS | | | | | | | | | | |

Notes :

1. B2-xxxxS is for Customer Design.
2. Load regulation is for output current change from 0 % to 100 % Max. Load.

Mechanical Dimension :



| Pin | 1K Vdc - Dual Split |
|-----|---------------------|
| 1 | +Vin |
| 2 | -Vin |
| 3 | --- |
| 4 | Vo2 (+) |
| 5 | Ground |
| 6 | Vo1 (+) |
| 7 | --- |

Note : " --- " means Omitted

4.2. 3K Vdc Isolation - Dual split output

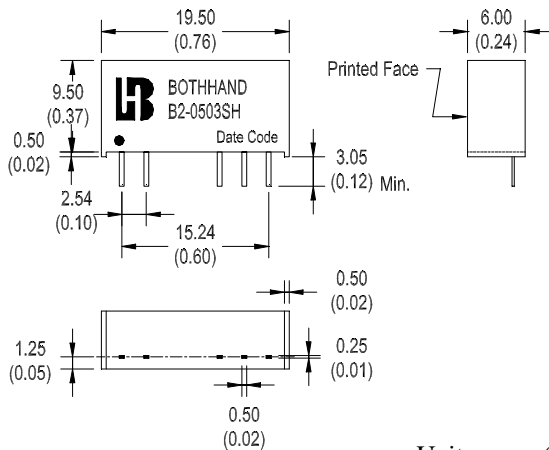
(Specifications typical at Ta = +25 °C, Nominal input voltage, Rated output current unless otherwise noted)

| Bothhand Model No. | Input Voltage (Vdc) | Output Voltage (Vdc) | | Output Current (mA) Max. | | Input Current @ No Load (mA) Typ. | Input Current @ Max. Load (mA) Typ. | Output Ripple (mV) Max. | Load Regulation (%) Max. | Efficiency (%) Typ. |
|--------------------|---------------------|----------------------|------|--------------------------|-----|-----------------------------------|-------------------------------------|-------------------------|--------------------------|---------------------|
| | | 3.3 | 5.0 | 100 | 100 | | | | | |
| B2-0503SH | 5 | 3.3 | 3.3 | 100 | 100 | 28 | 226 | 45 | ± 0.3 | 53 |
| B2-053R3SH | | 3.3 | 3.3 | 100 | 100 | 28 | 249 | 45 | ± 0.3 | 53 |
| B2-054R8SH | | 4.85 | 4.85 | 100 | 100 | 28 | 359 | 45 | ± 0.3 | 54 |
| B2-0505SH | | 5.0 | 5.0 | 100 | 100 | 28 | 370 | 45 | ± 0.3 | 54 |
| B2-1203SH | 12 | 3.0 | 3.0 | 100 | 100 | 18 | 93 | 45 | ± 0.3 | 54 |
| B2-123R3SH | | 3.3 | 3.3 | 100 | 100 | 18 | 102 | 45 | ± 0.3 | 54 |
| B2-124R8SH | | 4.85 | 4.85 | 100 | 100 | 18 | 147 | 45 | ± 0.3 | 55 |
| B2-1205SH | | 5.0 | 5.0 | 100 | 100 | 18 | 152 | 45 | ± 0.3 | 55 |
| B2-2403SH | 24 | 3.0 | 3.0 | 100 | 100 | 5 | 46 | 45 | ± 0.3 | 54 |
| B2-243R3SH | | 3.3 | 3.3 | 100 | 100 | 5 | 51 | 45 | ± 0.3 | 54 |
| B2-244R8SH | | 4.85 | 4.85 | 100 | 100 | 5 | 73 | 45 | ± 0.3 | 55 |
| B2-2405SH | | 5.0 | 5.0 | 100 | 100 | 5 | 76 | 45 | ± 0.3 | 55 |
| B2-xxxxSH | | | | | | | | | | |

Notes :

1. B2-xxxxSH is for Customer Design.
2. Load regulation is for output current change from 0 % to 100 % Max. Load.

Mechanical Dimension :



| Pin | 3K Vdc - Dual Split |
|-----|---------------------|
| 1 | +Vin |
| 2 | -Vin |
| 3 | --- |
| 4 | --- |
| 5 | Vo2 (+) |
| 6 | Ground |
| 7 | Vo1 (+) |

Units : mm (inch)

Tolerance : .xx ± 0.25

(± 0.01)

Note : " --- " means Omitted