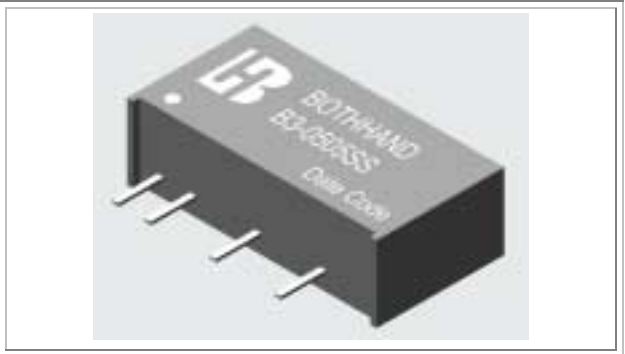


## 1. Features :

■ 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 <b>Absolute</b> 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		---	---	2	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	---	---	± 5.0	%
Output Voltage Balance	Dual Output same Load	---	---	± 1.0	
Switching Frequency	Nominal Input	---	110	---	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	---	50	---	pF
Max. Line Regulation (Per 1.0 % change in input change)		---	---	1.3	%

### 4. Model Selection Guide :

#### 4.1. 1K Vdc Isolation - Single output

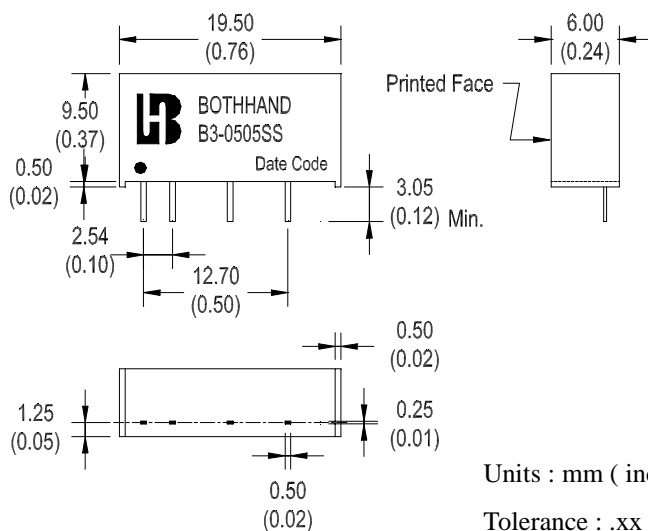
( Specifications typical at Ta = +25 °C, Nominal input voltage, Rated output current unless otherwise noted )

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.
B3-0505SS	5	5.0	400	45	506	70	± 8	79
B3-0512SS		12.0	167	42	500	100	± 8	80
B3-1205SS	12	5.0	400	26	211	70	± 8	79
B3-1212SS		12.0	167	25	208	100	± 8	80
B3-1215SS		15.0	134	24	206	120	± 8	81
B3-2405SS	24	5.0	400	8	105	70	± 8	79
B3-2412SS		12.0	167	7	101	100	± 8	82
B3-xxxxSS								

Notes :

- Standard output voltage is 5V, 9V, 12V, 15V, B3-xxxxSS is for Customer Design.
- Load regulation is for output current change from 20 % to 100 % Max. Load.

### Mechanical Dimension :



Units : mm ( inch )  
Tolerance : .xx ± 0.25  
( ± 0.01 )

Pin	1K Vdc - Single
1	+Vin
2	-Vin
3	---
4	Vo (-)
5	---
6	Vo (+)
7	---

Note : " --- " means Omitted

## 4.2. 1K Vdc Isolation - Dual output

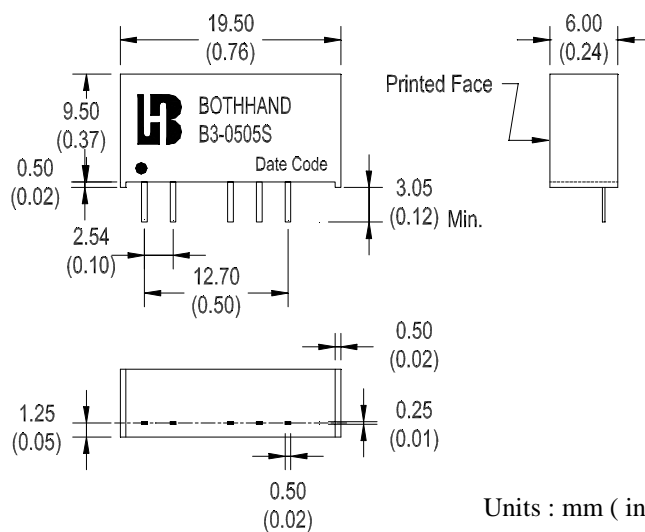
( Specifications typical at Ta = +25 °C, Nominal input voltage, Rated output current unless otherwise noted )

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.
B3-0505S	5	± 5.0	± 200	45	513	70	± 8	78
B3-0512S		± 12.0	± 84	42	500	100	± 8	80
B3-0515S		± 15.0	± 67	35	494	120	± 8	81
B3-1205S	12	± 5.0	± 200	26	214	70	± 8	78
B3-1212S		± 12.0	± 84	25	208	100	± 8	80
B3-1215S		± 15.0	± 67	24	208	120	± 8	80
B3-2405S	24	± 5.0	± 200	8	107	70	± 8	78
B3-247R2S		± 7.2	± 139	8	107	75	± 8	78
B3-2412S		± 12.0	± 84	7	103	100	± 8	81
B3-2415S		± 15.0	± 67	7	102	120	± 8	82
B3-xxxxS								

Notes :

- Standard output voltage is ±5V, ±9V, ±12V, ±15V, B3-xxxxS is for Customer Design.
- Load regulation is for output current change from 20 % to 100 % Max. Load.

### Mechanical Dimension :



Units : mm ( inch )  
Tolerance : .xx ± 0.25  
( ± 0.01 )

Pin	1K Vdc - Dual
1	+Vin
2	-Vin
3	---
4	Vo (-)
5	Common
6	Vo (+)
7	---

Note : " --- " means Omitted

### 4.3. 3K Vdc Isolation - Single output

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

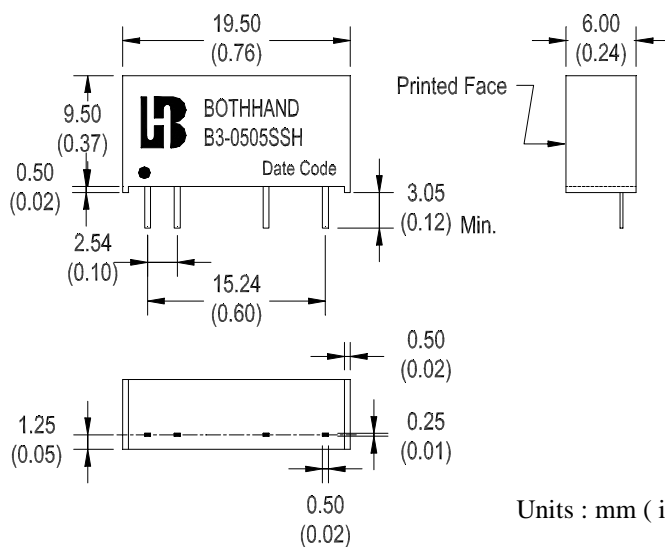
Bothhand Model No.	Input Voltage (Vdc)	Output Voltage (Vdc)	Output Current (mA) Max.	Input Current @ No Load (mA) Typ.	Input Current @ Max. Load (mA) Typ.	Output Ripple (mV) Max.	Load Regulation (%) Max.	Efficiency (%) Typ.
B3-0505SSH	5	5.0	400	45	506	70	± 8	79
B3-0512SSH		12.0	167	42	500	100	± 8	80
B3-0515SSH		15.0	134	35	494	120	± 8	81
B3-1205SSH	12	5.0	400	26	211	70	± 8	79
B3-1212SSH		12.0	167	25	208	100	± 8	80
B3-2405SSH	24	5.0	400	8	105	70	± 8	79
B3-2412SSH		12.0	167	7	102	100	± 8	82
B3-2415SSH		15.0	133	7	102	120	± 8	82
B3-xxxxSSH								

Notes :

- Standard output voltage is 5V, 9V, 12V, 15V, B3-xxxxSSH is for Customer Design.
- Load regulation is for output current change from 20 % to 100 % Max. Load.

### Mechanical Dimension :

#### (1). Detail Dimension



Units : mm ( inch )  
Tolerance : .xx ± 0.25  
( ± 0.01 )

Pin	3K Vdc - Single
1	+Vin
2	-Vin
3	---
4	---
5	Vo (-)
6	---
7	Vo (+)

Note : " --- " means Omitted

## 4.4. 3K Vdc Isolation - Dual output

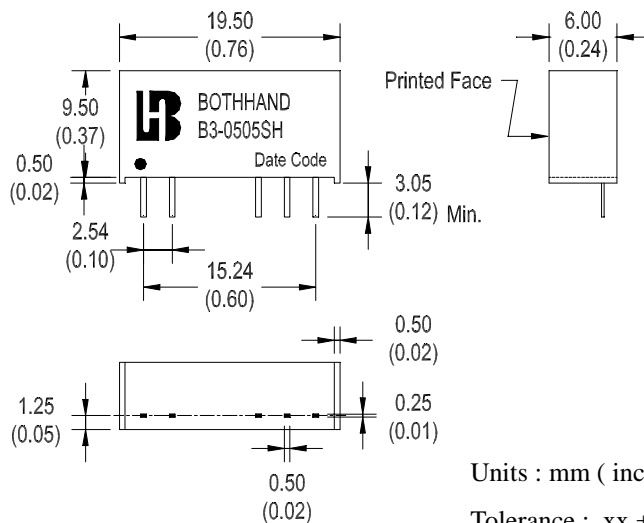
( Specifications typical at Ta = +25 °C, Nominal input voltage, Rated output current unless otherwise noted )

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.
B3-0505SH	5	± 5.0	± 200	45	513	70	± 8	78
B3-0515SH		± 15.0	± 67	35	494	120	± 8	81
B3-1205SH	12	± 5.0	± 200	26	214	70	± 8	78
B3-1212SH		±12.0	± 84	25	205	100	± 8	80
B3-2405SH	24	± 5.0	± 200	8	111	70	± 8	78
B3-247R2SH		± 7.2	± 139	8	107	75	± 8	78
B3-2412SH		± 12.0	± 84	7	103	100	± 8	81
B3-2415SH		± 15.0	± 67	7	102	120	± 8	82
B3-xxxxSH								

Notes :

- Standard output voltage is ±5V, ±9V, ±12V, ±15V, B3-xxxxSH is for Customer Design.
- Load regulation is for output current change from 20 % to 100 % Max. Load.

### Mechanical Dimension :



Units : mm ( inch )  
Tolerance : .xx ± 0.25  
( ± 0.01 )

Pin	3K Vdc - Dual
1	+Vin
2	-Vin
3	---
4	---
5	Vo (-)
6	Common
7	Vo (+)

Note : " --- " means Omitted