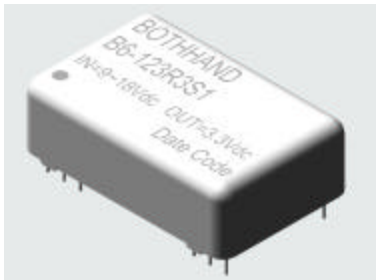


1. Features :

■ Wide 2:1 Input Range	
■ Low Ripple and Noise	
■ Input / Output Isolation 1.5K Vdc or 3.5K Vdc	
■ 100 % Burn-In	
■ Input p - Filter	
■ 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	12V Input Model	-0.7	12	22.5	Vdc
	24V Input Model	-0.7	24	45	
	48V Input Model	-0.7	48	90	
Output Short circuit duration	Nominal Input Range	Indefinite & Auto-Restart			
Reverse Polarity Input current Limit	---	---	---	1	A
Operating temperature	Output Full Load	-25	---	+71	Deg
Storage temperature		-55	---	+125	

3. Nominal Input / Output Electrical Specifications :

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

Parameter	Condition	Min.	Typ.	Max.	Unit
Input Voltage Range	12V Input Model	9	12	18	Vdc
	24V Input Model	18	24	36	
	48V Input Model	36	48	72	
Line Regulation	Output full Load	---	---	± 0.5	%
Load Regulation	Single Output Model	---	---	± 0.5	
	Dual Output Model			± 2	
Output Voltage Accuracy	Nominal Input	---	---	± 1.0	
Output Voltage Balance	Dual Output at same Load	---	---	± 1.0	
Switching Frequency	Nominal Input	---	250	---	KHz
Temperature Coefficient		---	± 0.01	± 0.02	% / °
Isolation Voltage	Standard Series	1500	---	---	Vdc
	High Isolation Series	3500	---	---	
Isolation Resistance	500 Vdc	1000	---	---	M?
Isolation Capacitance	1 KHz / 250 mV rms	---	350	---	pF

4. Single Output Selection Guide :

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

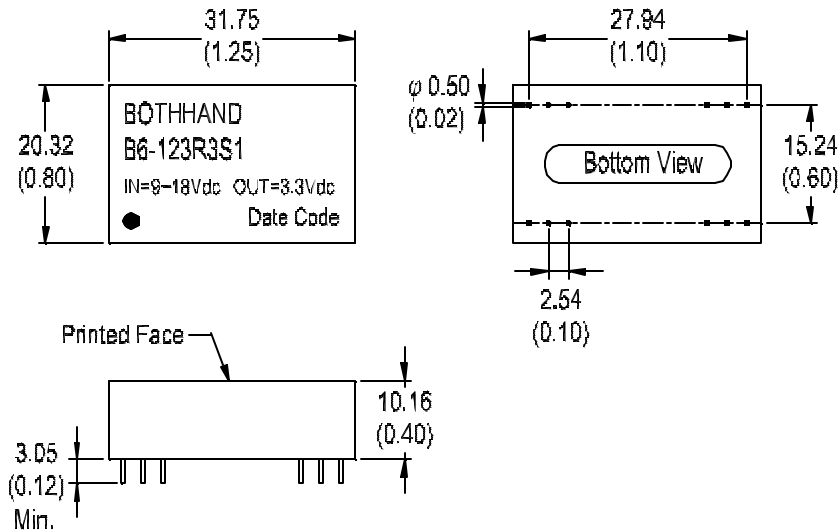
Bothhand Model No.	Input Voltage (Vdc)	Output Voltage (Vdc)	Output Current (mA) Max	Input Current @ No Load (mA) Typ.	Input Current @ Max. Load (mA) Typ.	Output Ripple (mV) Max.	Load Regulation (%) Max.	Efficiency (%) Typ.
1.5 W Single output Series :								
B6-123R3S1	9 ~ 18	3.3	400	9	170	50	± 0.5	68
B6-1205S1		5.0	300	9	178	50	± 0.5	70
B6-1212S1		12.0	125	9	172	100	± 0.5	73
B6-2405S1	18 ~ 36	5.0	300	6	87	50	± 0.5	72
B6-2412S1		12.0	125	6	84	100	± 0.5	75
B6-2415S1		15.0	100	6	82	120	± 0.5	77
B6-4805S1	36 ~ 72	5.0	300	3	43	50	± 0.5	73
2.0 W Single output Series :								
B6-1205S2	9 ~ 18	5.0	400	9	235	50	± 0.5	71
B6-1215S2		15.0	134	9	226	120	± 0.5	74
B6-2405S2	18 ~ 36	5.0	400	6	116	50	± 0.5	72
B6-2412S2		12.0	167	6	113	100	± 0.5	74
B6-2415S2		15.0	134	6	109	120	± 0.5	77
B6-4805S2	36 ~ 72	5.0	400	3	57	50	± 0.5	73
B6-4812S2		12.0	167	3	55	100	± 0.5	76
3.0 W Single output Series :								
B6-1205S3	9 ~ 18	5.0	600	20	338	50	± 0.5	74
B6-1212S3		12.0	250	25	325	100	± 0.5	77
B6-2405S3	18 ~ 36	5.0	600	12	169	50	± 0.5	74
B6-2412S3		12.0	250	15	162	100	± 0.5	77
B6-2415S3		15.0	200	17	158	120	± 0.5	78
B6-4805S3	36 ~ 72	5.0	600	7	85	50	± 0.5	74
B6-4812S3		12.0	250	8	80	100	± 0.5	78
B6-xxxxSx								

Notes :

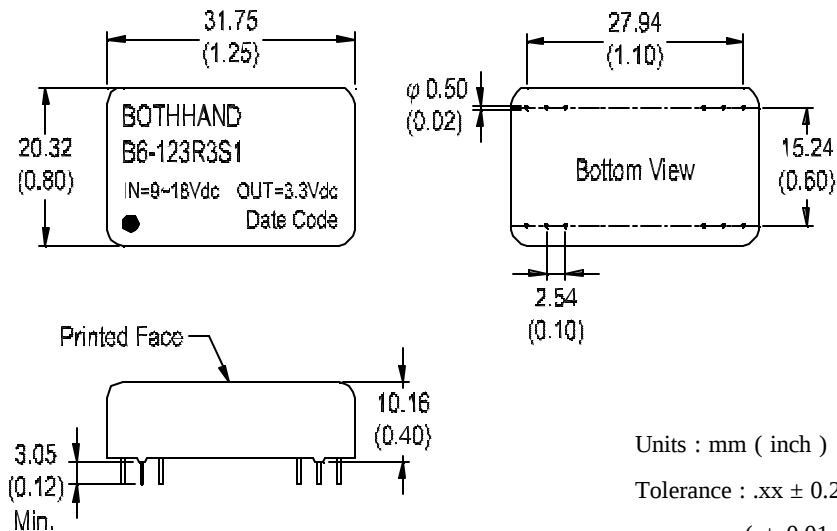
- Standard output Voltage is 3.3V, 5V, 9V, 12V, 15V, **B6-xxxxSx** is for Customer Design.
- Load regulation is for output current change from 0 % to 100 % Max. Load.
- Suffix “H” for 3500 Vdc Isolation. (**B6-xxxxSxH**)
- Suffix “M” for Metal case, “P” for Plastic case

4.1. 1.5K Vdc Isolation Mechanical:(Single O/P)

(1). Plastic Case:



(2). Nickel Coated Metal Case:



Pin	1.5K Vdc - Single		Pin
1	+Vin	+Vin	24
2	NC	NC	23
3			22
4	---	---	21
5			20
6			19
7			18
8			17
9			16
10	Vo (-)	Vo (-)	15
11	Vo (+)	Vo (+)	14
12	-Vin	-Vin	13

Note: "—" means Omitted

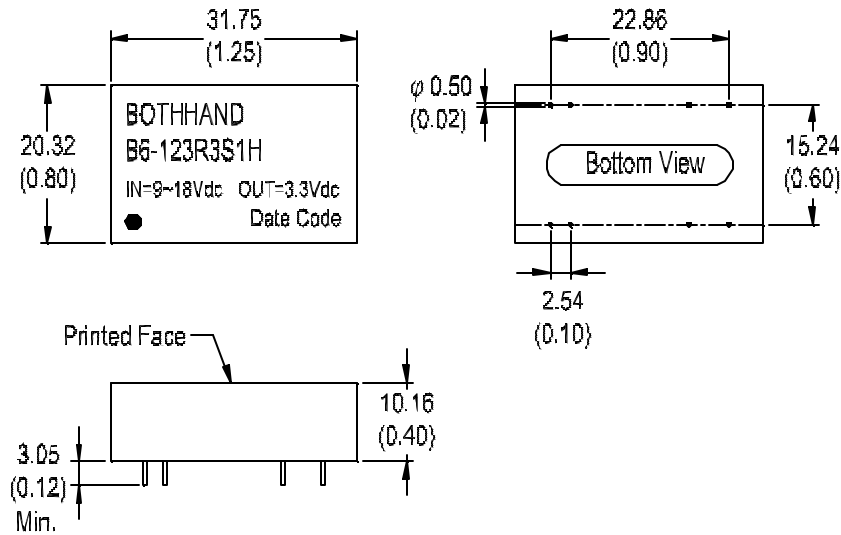
Units : mm (inch)

Tolerance : .xx ± 0.25

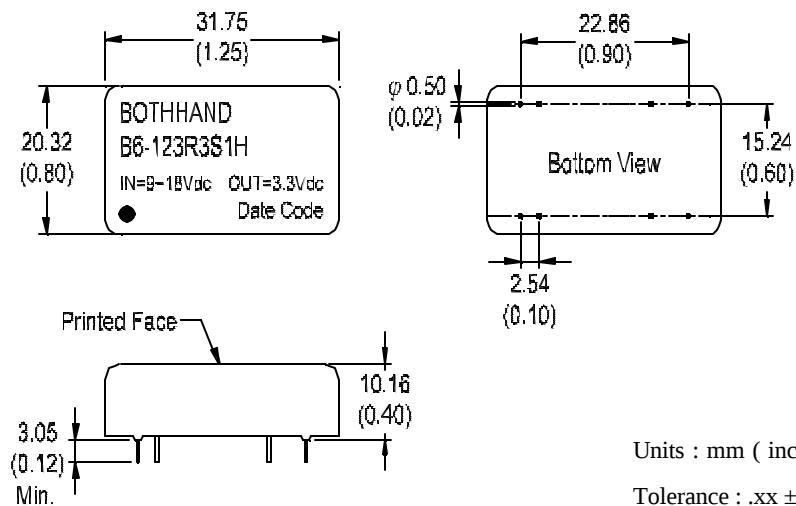
(± 0.01)

4.2. 3.5K Vdc Isolation Mechanical:(Single O/P)

(1). Plastic Case:



(2). Nickel Coated Metal Case:



Pin	3.5K Vdc - Single		Pin
1	---	---	24
2	-Vin	+Vin	23
3			22
4			21
5	---	---	20
6			19
7			18
8			17
9	NC	Vo (-)	16
10	---	---	15
11	NC	Vo (+)	14
12	---	---	13

Note: " --- " means Omitted

Units : mm (inch)

Tolerance : .xx ± 0.25

(± 0.01)

5. Dual Output Selection Guide :

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

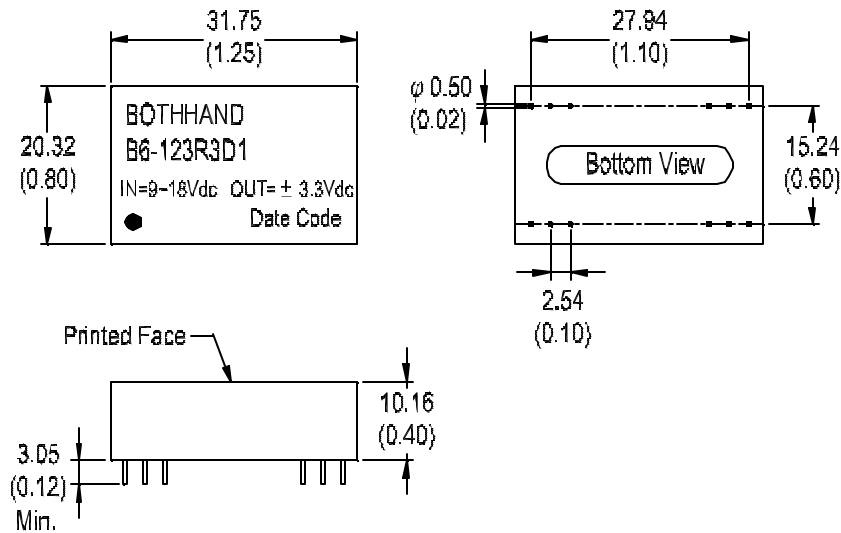
Bothhand Model No.	Input Voltage (Vdc)	Output Voltage (Vdc)	Output Current (mA) Max	Input Current @ No Load (mA) Typ.	Input Current @ Max. Load (mA) Typ.	Output Ripple (mV) Max.	Load Regulation (%) Max.	Efficiency (%) Typ.
1.5 W Dual output Series:								
B6-123R3D1	9 ~ 18	± 3.3	± 200	9	160	50	± 2	69
B6-1205D1		± 5.0	± 150	9	169	50	± 2	74
B6-2405D1	18 ~ 36	± 5.0	± 150	8	84	50	± 2	75
B6-2412D1		± 12.0	± 63	8	80	100	± 2	79
B6-2415D1		± 15.0	± 50	8	79	120	± 2	79
B6-4805D1	36 ~ 72	± 5.0	± 150	3	42	50	± 2	74
B6-4815D1		± 15.0	± 50	3	40	120	± 2	79
2.0 W Dual output Series:								
B6-1205D2	9 ~ 18	± 5.0	± 200	9	225	60	± 2	74
B6-1212D2		± 12.0	± 83	9	215	60	± 2	77
B6-2405D2	18 ~ 36	± 5.0	± 200	6	110	60	± 2	76
B6-4805D2	36 ~ 72	± 5.0	± 200	3	56	60	± 2	75
B6-4812D2		± 12.0	± 83	3	53	100	± 2	78
3.0 W Dual output Series:								
B6-1205D3	9 ~ 18	± 5.0	± 300	20	333	60	± 2	75
B6-1212D3		± 12.0	± 125	23	321	100	± 2	78
B6-2405D3	18 ~ 36	± 5.0	± 300	13	162	60	± 2	77
B6-2412D3		± 12.0	± 125	15	156	100	± 2	80
B6-4805D3	36 ~ 72	± 5.0	± 300	7	83	60	± 2	76
B6-4812D3		± 12.0	± 125	8	79	100	± 2	79
B6-4815D3		± 15.0	± 100	10	78	120	± 2	80
B6-xxxxDx								

Notes :

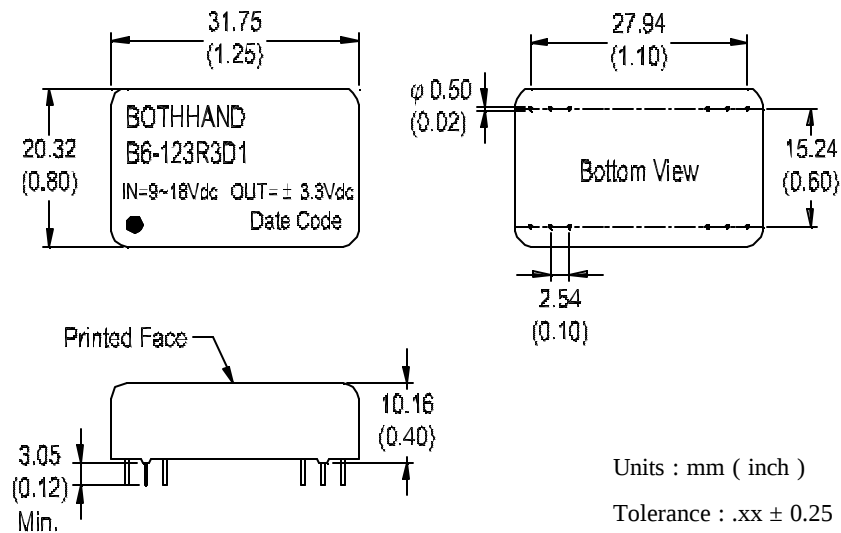
- Standard output Voltage is 3.3V, 5V, 9V, 12V, 15V, B6-xxxxDxis for Customer Design.
- Load regulation is for Each output current change from 20 % to 100 % Max. Load.
- Suffix “H” for 3.5K Vdc Isolation. (B6-xxxxDxH)
- Suffix “M” for Metal case, “P” for Plastic case.

5.1. 1.5K Vdc Isolation Mechanical: (Dual O/P)

(1). Plastic Case:



(2). Nickel Coated Metal Case:



Pin	1.5K Vdc - Dual		Pin
1	+Vin	+Vin	24
2	Vo (-)	Vo (-)	23
3	Common	Common	22
4	---	---	21
5			20
6			19
7			18
8			17
9			16
10	Common	Common	15
11	Vo (+)	Vo (+)	14
12	-Vin	-Vin	13

Note: " --- " means Omitted

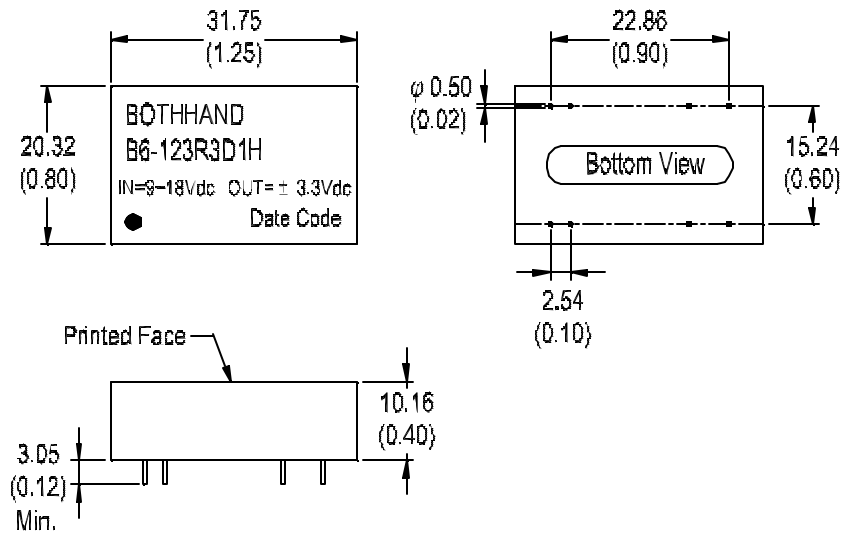
Units : mm (inch)

Tolerance : .xx ± 0.25

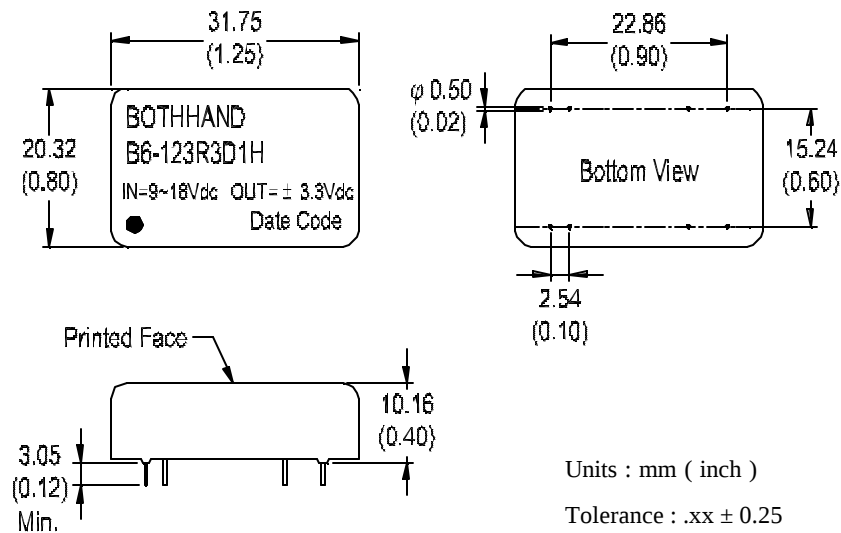
(± 0.01)

5.2. 3.5K Vdc Isolation Mechanical:(Dual O/P)

(1). Plastic Case:



(2). Nickel Coated Metal Case:



Pin	3.5K Vdc - Dual		Pin
1	---	---	24
2	-Vin	+Vin	23
3			22
4			21
5	---	---	20
6			19
7			18
8			17
9	Common	Common	16
10	---	---	15
11	Vo (-)	Vo (+)	14
12	---	---	13

Note: " --- " means Omitted

Units : mm (inch)

Tolerance : .xx ± 0.25

(± 0.01)