

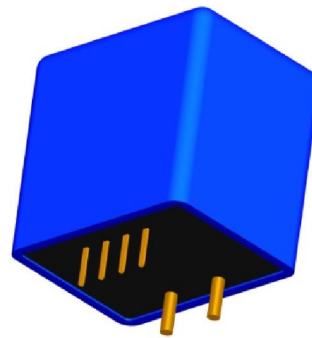


Description

For the electronic measurement of currents : DC, AC, pulsed, mixed, with a galvanic isolation between the primary circuit and the secondary circuit

Features

- ◆ Galvanic isolation between primary and secondary circuit
- ◆ Hall effect measuring principle
- ◆ Isolation voltage 3000V
- ◆ Low power consumption
- ◆ Extended measuring range(2.5x I_{PN})
- ◆ Power supply from ±12V to ±15V



Advantages

- ◆ Low insertion losses
- ◆ Easy to mount with automatic handling system
- ◆ Small size and space saving
- ◆ Only one design for wide current ratings range
- ◆ High immunity to external interference.

TYPES OF PRODUCTS		
Type	Primary nominal current r. m. s I _{PN} (A)	Primary current measuring range I _P (A)
BST1-10IOV2H	10	±15
BST1-15IOV2H	15	±25
BST1-20IOV2H	20	±35
BST1-25IOV2H	25	±35
BST1-30IOV2H	30	±75

**Parameters Table**

PARAMETERS	SYMBOL	UNIT	VALUE	CONDITIONS
Electrical Data				
Supply voltage($\pm 5\%$)	V_C	V	± 15	
Current consumption	I_C	mA	$< \pm 15$	
Output voltage	V_{OUT}	V	± 4	@ $\pm I_{PN}$, $R_L = 10\text{ k}\Omega$, $T_A = 25^\circ\text{C}$
Output internal resistance	R_{OUT}	Ω	100	approx
Load resistance	R_L	$\text{K}\Omega$	≥ 10	
R. m. s voltage for AC isolation test	V_d	KV	> 3	@50/60Hz, 1 min
Accuracy - Dynamic performance data				
Accuracy($0 \dots \pm I_{PN}$)	X	%	$< \pm 1$	@ I_{PN} , $T_A = 25^\circ\text{C}$ (without offset)
Linearity($0 \dots \pm I_{PN}$)	ϵ_L	%	$< \pm 1$	@ I_{PN} , $T_A = 25^\circ\text{C}$
Electrical offset voltage	V_{OE}	mV	$< \pm 20$	@ $T_A = 25^\circ\text{C}$
Hysteresis offset voltage	V_{OH}	mV	$< \pm 15$	@ $I_P \rightarrow 0$
Response time	t_r	μs	≤ 3	@ 90% of I_{PN}
Frequency bandwidth(-3dB)	BW	kHz	DC~50	@-3db
Thermal drift of V_{OE}	V_{OT}	mV/K	± 1.5	
Thermal drift of the gain	TCE_G	%/K	± 0.1	
General data				
Ambient operating temperature	T_A	$^\circ\text{C}$		-40....+105
Ambient storage temperature	T_S	$^\circ\text{C}$		-40....+105

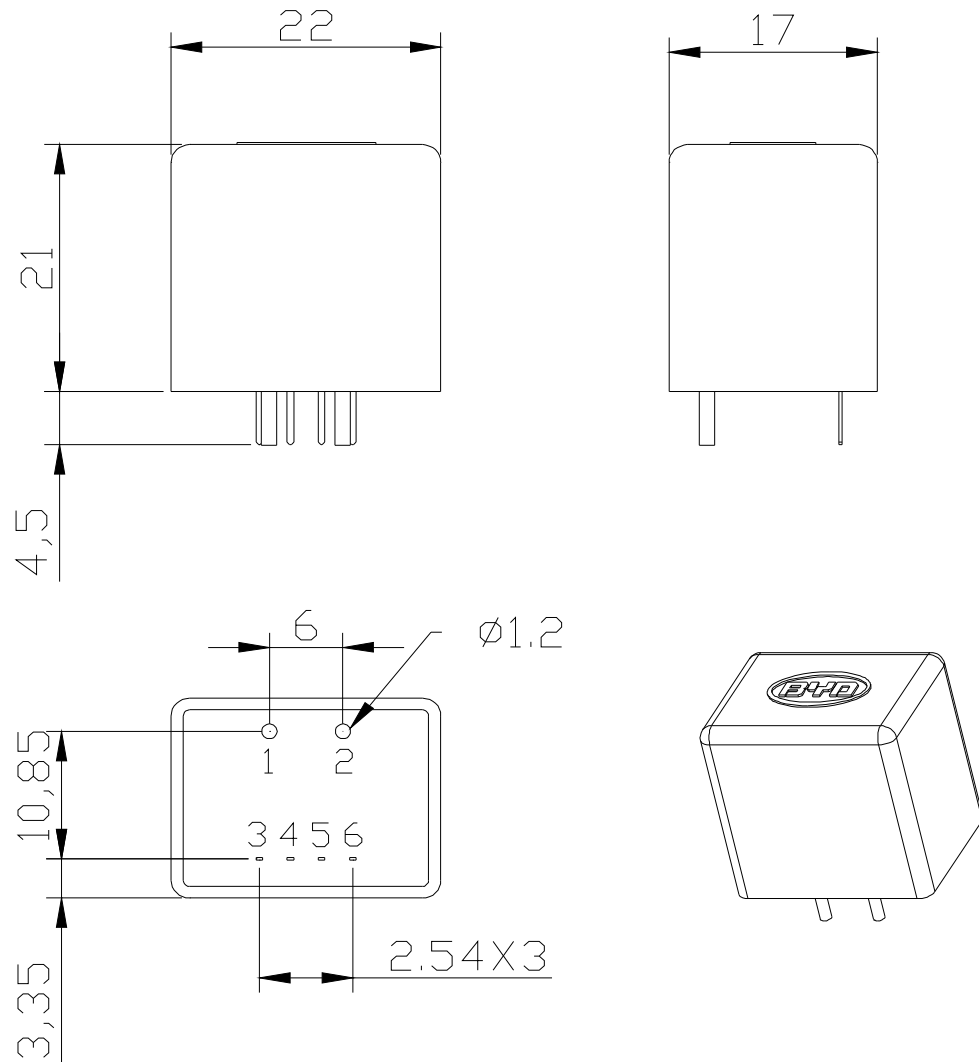
Notes:

- (1) Operating at $\pm 12\text{V} < V_C < \pm 15\text{V}$ will reduce measuring range.



Dimensions BST1-IOV2H (in mm. 1 mm = 0.0394 inch)

(1) BST1-10...15IOV2H



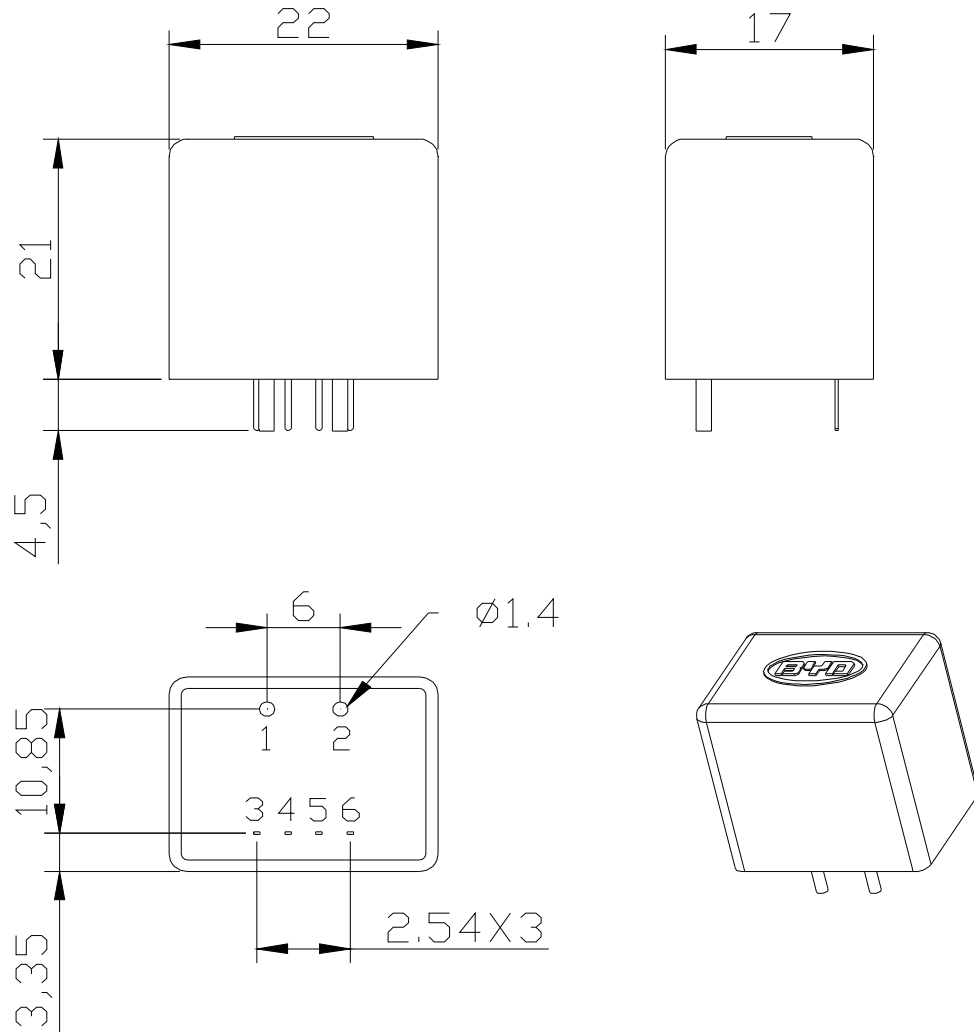
General Tolerance : $\pm 0.2\text{mm}$

Terminal Pin

1. Primary input Current(-)
2. Primary input Current(+)
3. Output
4. +15V
5. 0V
6. -15V



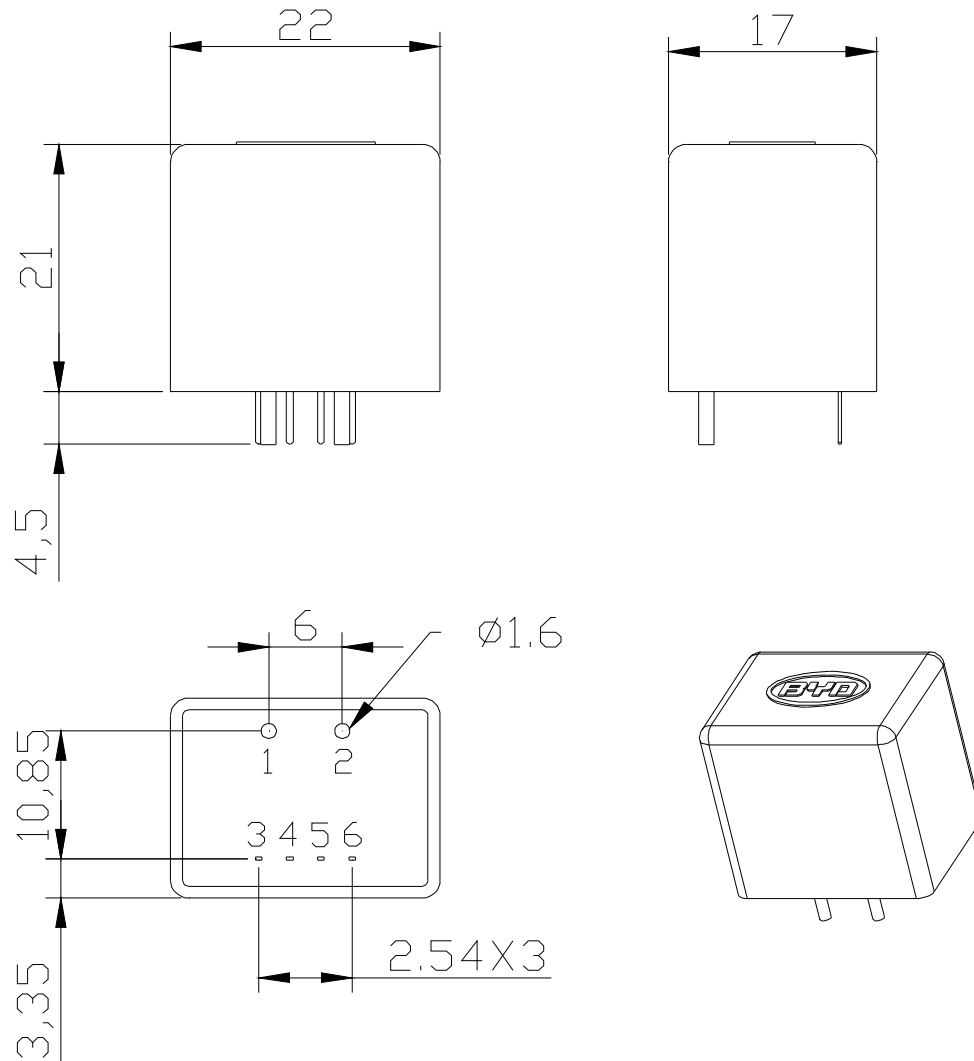
(2) **BST1-20...25IOV2H**



General Tolerance : $\pm 0.2\text{mm}$

Terminal Pin

- 1. Primary input Current(-)
- 2. Primary input Current(+)
- 3. Output
- 4. +15V
- 5. 0V
- 6. -15V

(3) BST1-30IOV2HGeneral Tolerance : $\pm 0.2\text{mm}$ **Terminal Pin**

1. Primary input Current(-)
2. Primary input Current(+)
3. Output
4. +15V
5. 0V
6. -15V

**◆ Instructions of use**

1. When the test current passes through the sensors you can get the size of the output voltage.
(Warning: wrong connection may lead to sensors damage)
2. Based on user needs, the sensors output range can be appropriately regulated.
3. According to user needs, different rated input currents and output voltages of the sensors can be customized.

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