

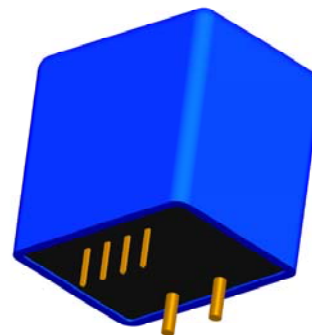


Description

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(3x I_{PN})
- ◆ Power supply from ±12V to ±15V
- ◆ Material according to UL94-V0



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.

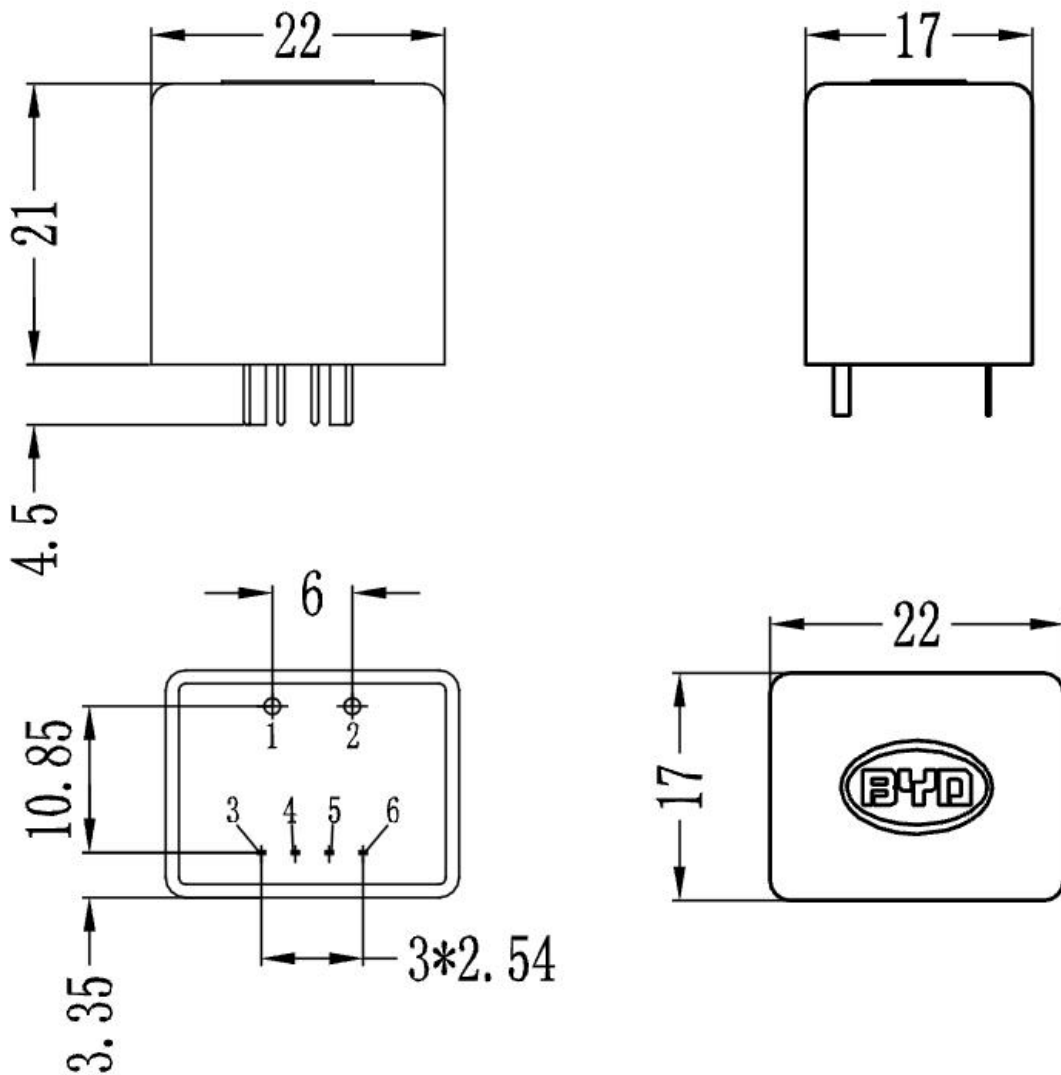
TYPES OF PRODUCTS		
Type	Primary nominal current r. m. s I _{PN} (A)	Primary current measuring range I _P (A)
BST1-3/4IOV2M	3	±9
BST1-5/4IOV2M	5	±15
BST1-10/4IOV2M	10	±30
BST1-15/4IOV2M	15	±45
BST1-20/4IOV2M	20	±60
BST1-25/4IOV2M	25	±75
BST1-50/4IOV2M	50	±150

**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	< 50	approx
Load resistance	R_L	$\text{K}\Omega$	$\cong 10$	
R. m. s voltage for AC isolation test	V_d	KV	> 3	@50/60Hz, 1 min
Accuracy - Dynamic performance data				
Accuracy	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	$< \pm 40$	@ $T_A = 25^\circ\text{C}$
Hysteresis offset voltage	V_{OH}	mV	$< \pm 15$	@ $I_P = 0$
Response time	t_r	μS	$\cong 3$	@ 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....+85
Ambient storage temperature	T_S	$^\circ\text{C}$		-40....+105

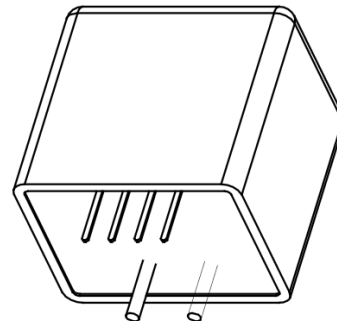


Dimensions BST1-IOV2M (in mm. 1 mm = 0.0394 inch)



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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