Description

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

I_{PN} = 2000A

Features

- Hall effect measuring principle
- Galvanic isolation between primary and secondary circuit
- Low power consumption
- Extended measuring range
- Insulated plastic case recognized according to UL 94-V0

Advantages

- Very good linearity
- Excellent accuracy
- Low temperature drift
- Wide frequency bandwidth
- Optimized response time
- No insertion losses
- High immunity against external interference
- Excellent performance and price

Industrial applications

- AC variable speed drives
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Power supplies for welding applications
- Static converters for DC motor drives
- Switched-Mode Power Supplies (SMPS)

TYPES OF PRODUCTS

Type	Primary nominal current r. m. s I_{PN} (A)	Measuring resistance R_M (Ω)			
BSH-2000IC V5M	±2000 A_{max}	0～4	with ±15V@75℃	0～3	with ±15V@85℃
	±2000 A_{max}	2～22	with ±24V@75℃	8～21	with ±24V@85℃
	±3000 A_{max}	2～6	with ±24V@75℃	8～8	±2800A with ±24V@85℃

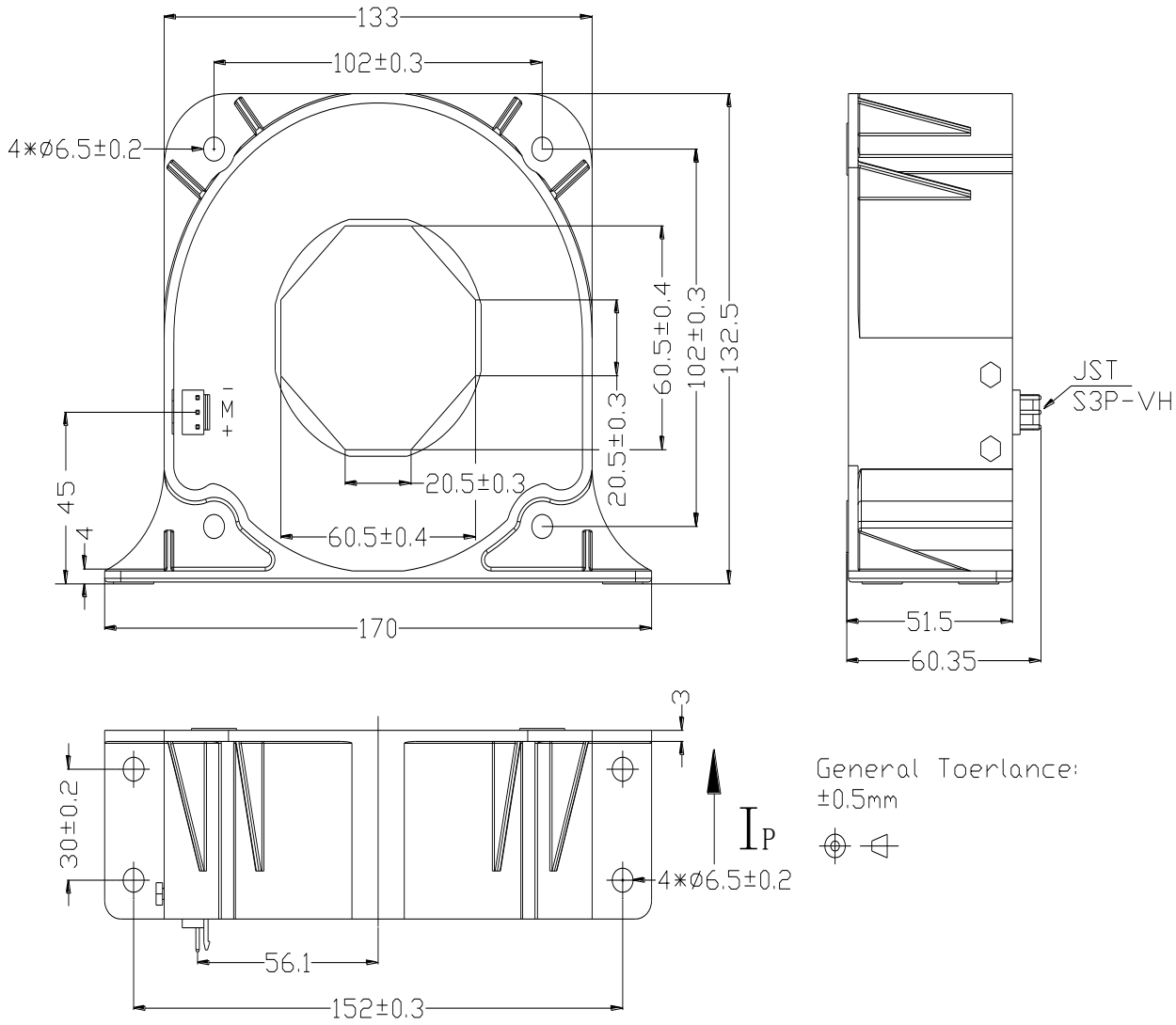
Parameters Table

PARAMETERS	SYMBOL	UNIT	VALUE	CONDITIONS
Electrical data				
Supply voltage(±5%)	V_C	V	±15～±24	
Current consumption	I_C	mA	33(@±24)+Is	
Secondary nominal r.m.s. current	I_{SN}	mA	400	
Conversion ratio	K_N		1:5000	
R. m. s voltage for AC isolation test	V_d	KV	3	@50Hz, 1 min
Accuracy - Dynamic performance data				
Linearity	ε_L	%	<±0.1	
Accuracy	X_G	%	<±0.3	@ I_{PN}, T_A = 25℃
Offset current	I_O	mA	<±0.5	@ I_P = 0,T_A = 25℃
Magnetic offset current	I_{OM}	mA	±0.2	@Ip=0and specified Rm,after an overload of 3×I_{PN}
Thermal drift of Io	I_{OT}	mA	<±0.5	@－25℃～+85℃
			<±1.5	@－40C～-25℃
Response time	t_r	μS	<1	@ 90% of I_{PN} step
d_i/d_t accurately followed	d_i/d_t	A/μS	>50	
Frequency bandwidth (1)	BW	kHz	DC~100	@-1dB
General data				
Ambient operating temperature	T_A	℃	-40 ~ +85	
Ambient storage temperature	T_S	℃	-50~ +90	
Secondary coil resistance	Rs	Ω	27.5	@ T_A = 70℃
			28.5	@ T_A = 85℃
Mass	m	kg	1.5	
Isolation characteristics				
Creepage distance	dCp	mm	29.1	
Clearance distance	dCI	mm	27.1	
Comparative Tracking Index	CTI		600	Group I

Notes:

(1) Please refer to derating curves in the technical file to avoid excessive core heating at high frequency.

Dimensions BSH-2000ICV5M (in mm. 1 mm = 0.0394 inch)



◆Instructions of use

1. When the test current passes through the sensors you can get the size of the output current. (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 currents of the sensors can be customized.
4. You can get the best dynamic characteristics when the input current complete filling the primary hole.
5. It is the best magnetic coupling, when the primary circuit close to the bottom of sensor.

RESTRICTIONS ON PRODUCT USE

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