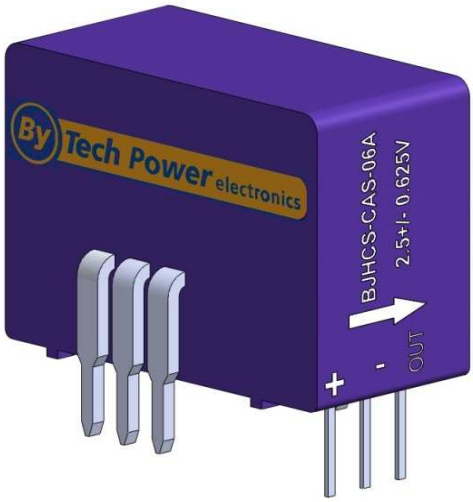
DATA SHEET
Hall Effect Current Sensor

PN : BJHCS-CAS | **IPN = 6A - 15A - 25A**

Features

- **Closed loop**
- **High accuracy**
- **Supply voltage : +5V DC**
- **Voltage output**
- **Small PCB mounting**
- **Can be customized**
- Very good linearity
- Low power consumption
- Good over-current capability



Applications

- Frequency drive control home appliances
- Solar power management system
- Inverter applications
- Uninterruptible power supplies (UPS)
- Current monitoring

CE

RoHS COMPLIANT

REACh

ELECTRICAL DATA

BJHCS-CAS-…	6A	15A	25A
Nominal rms current I_{PN} (A)	6	15	25
Sensed current range I_{PM} (A)	±19,2	±48	±84
Measuring resistance R_M (Ω)	100	50	50
Secondary coil turns (T_S)	$960^{\pm 1}$	$1200^{\pm 1}$	$2000^{\pm 2}$
Rated output voltage (V)	V_{OE} ± 0,625		
Supply voltage V_C (Vdc)	$+5^{\pm 5\%}$		
Static current consumption I_C(mA)	10		

ACCURACY DYNAMIC PERFORMANCE

Accuracy	± 0,7	%
Zero offset voltage V_{OE} @ IP=0, T=25℃	$2,5^{\pm 0.02}$	V
Offset voltage drift V_{OE} @ - 40℃ to 85℃	≤ ± 0,5	mV/℃
Linearity error ε_L	≤ 0,1	% FS
di/dt accurately followed	> 50	A/µs
Response time tr	<1	µs
Bandwith (- 1db)	DC to 200	kHz

GENERAL & ISOLATION CHARACTERISTICS

Operating temperature	-40 to +85	℃
Storage temperature	-40 to +126	℃
Weight	10	g
Insulation voltage (50 Hz, 1min)	3	KV
Impulse withstand voltage (1,2/50µs)	>8	KV
Creepage distance (shell)	15,4	mm

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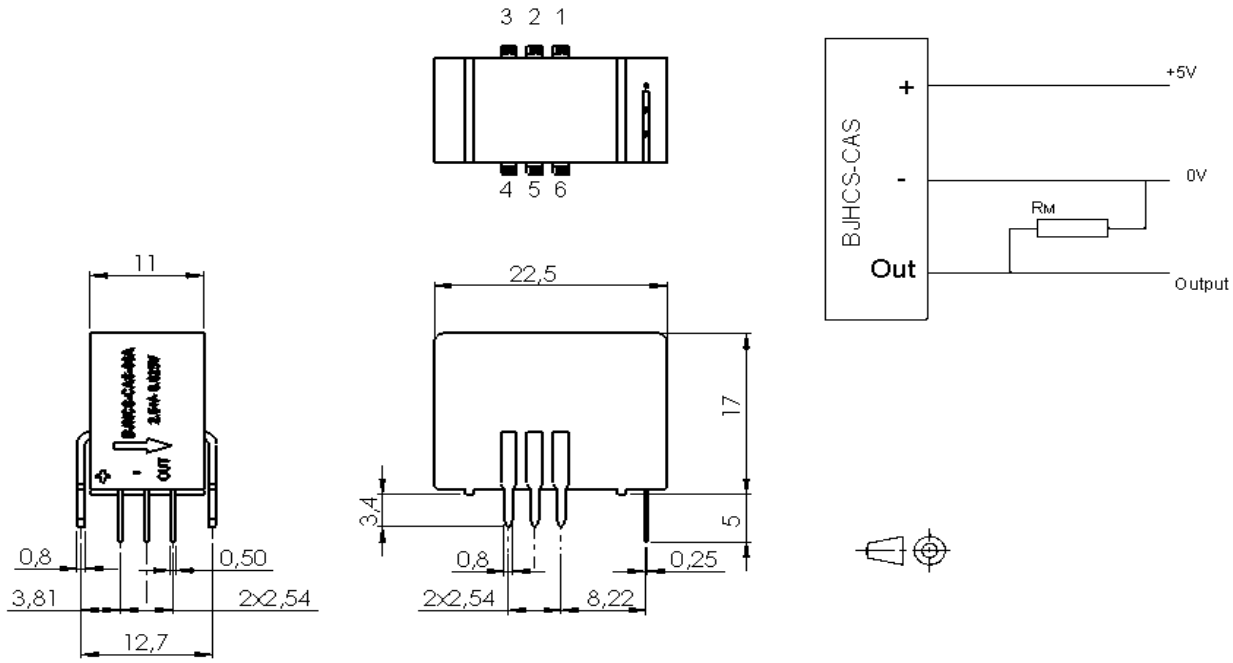
DIMENSIONS



WIRING DIAGRAM

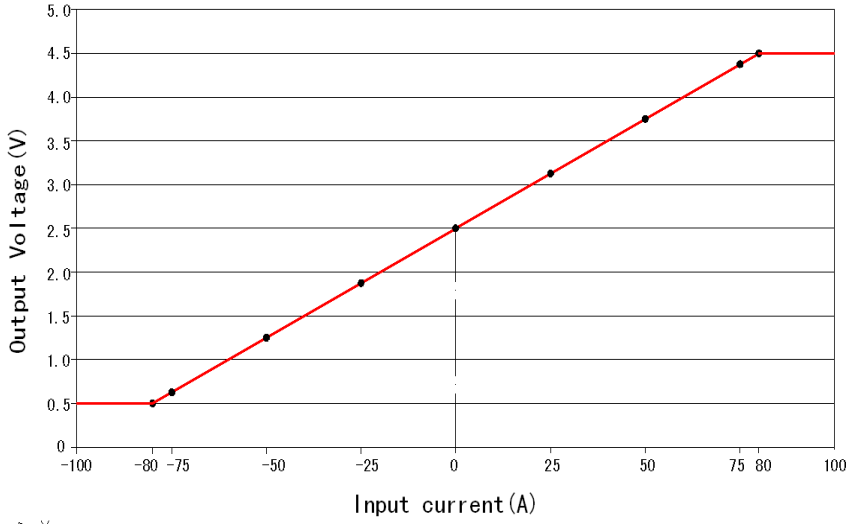
Cable hole current input (N^{ber} primary turns)	Rated current CAS-... 6A	15A	25A	Output rated (V)	Primary (mΩ)	Primary (µH)	PCB current input (Input Pin Connection)
1	±6	±15	±25	2,5 ± 0,625	0,18	0,013	out: 6—5—4 / in: 1—2—3
2	±3	±7,5	±12,5	2,5 ± 0,625	0,81	0,05	out: 6—5 4 / in: 1—2 3
3	±2	±5	±8,3	2,5 ± 0,625	1,62	0,12	out: 6 5 4 / in: 1 2 3

Cautions :

- Do respect the wiring diagram in accordance whith the current value and its direction.

BJHCS-CAS-25A : Relation between Input Current and Output voltage :

Input current (A)	-80	-75	-50	-25	0	25	50	75	80
Output voltage (V)	0,5	0,625	1,25	1,875	2,5	3,125	3,75	4,375	4,5



MECHANICAL CHARACTERISTICS	
General tolerance	± 0,2 mm
Primary pins	6, size 0,8x0,8 mm
Terminal connection	3 pins , size 0,25x0,5 mm

WARNING : Incorrect wiring may cause damage to the sensor.

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