

## Product Data sheet : Hall Effect Current Sensor - HD100...1K0T01

Date : 02.05.2015

Rev : 01

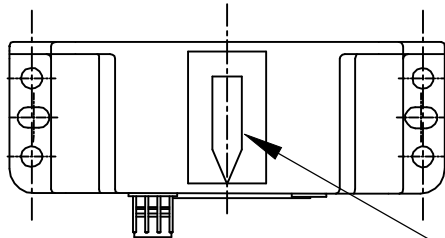
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Customer: ---

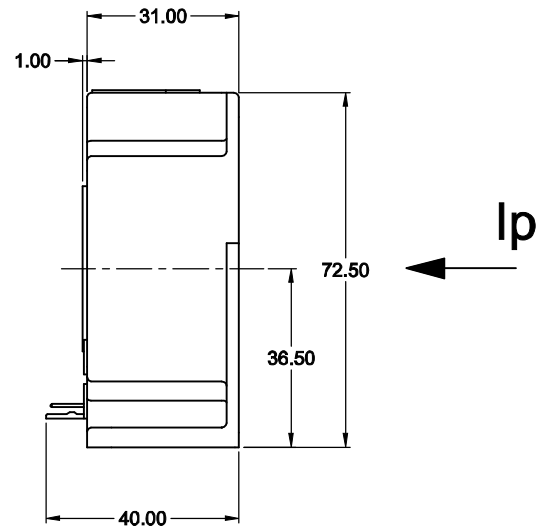
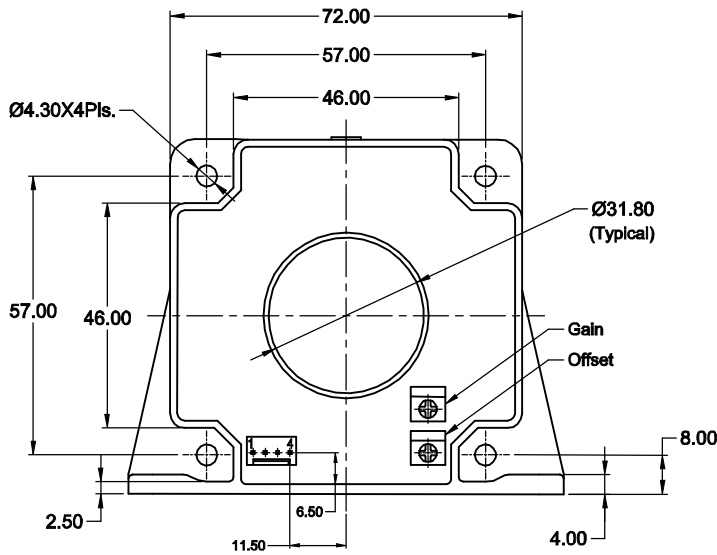
Customer's part No.: ---

**Pb** RoHS Compliant

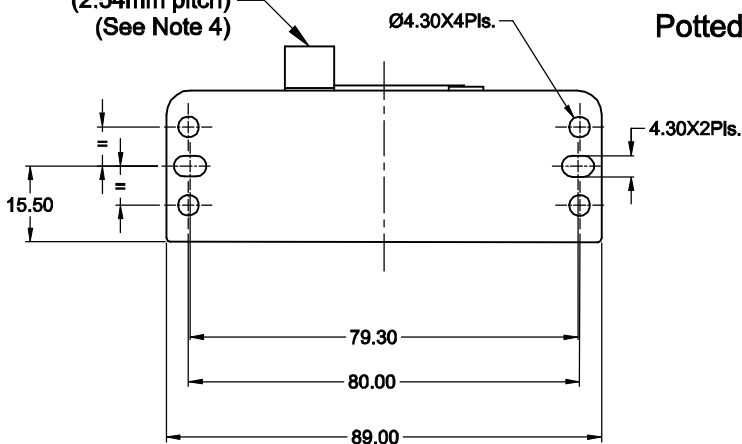
### ● MECHANICAL DIMENSIONS



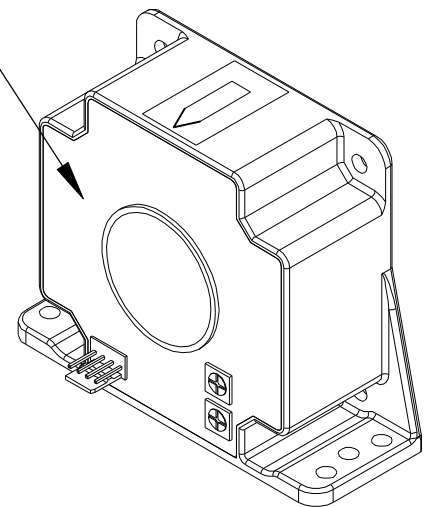
Ip Direction



4 pin Relimate Header  
(2.54mm pitch)  
(See Note 4)



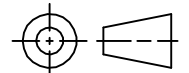
Potted surface



### TERMINAL MARKING

- 1 : Supply Voltage (+Vcc)
- 2 : Supply Voltage (-Vee)
- 3 : Output (Vout)
- 4 : Ground (0V)

GENERAL TOL.  
±0.5 mm



ALL DIMENSIONS  
ARE IN 'mm'

SCALE -NTS

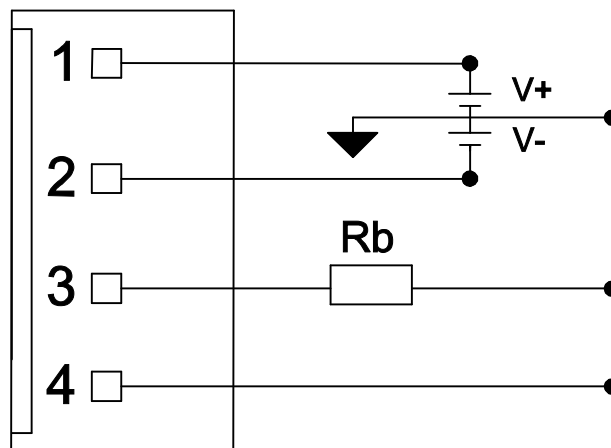
● APPLICATION :

Used for measurement of electric current, AC, DC, Pulsed in electrical & electronic equipment.

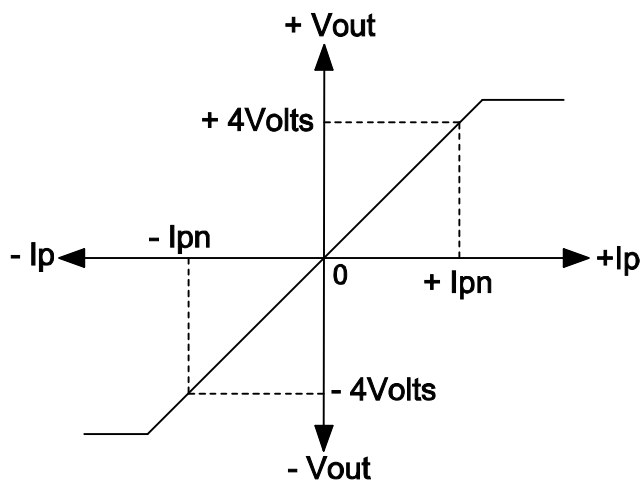
● FEATURES :

- Open loop current sensor.
- Voltage output.
- Panel Mountable.

● CONNECTION DIAGRAM



● INPUT & OUTPUT CHARACTERISTICS



+ Ip Indicates primary current flowing in the direction of the arrow

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PRIMARY NOMINAL CURRENT I <sub>pn</sub> (A)	PRIMARY MEASURING RANGE I <sub>p</sub> (A)	PRODUCT CODE
100	± 300	HD100T01
200	± 600	HD200T01
300	± 900	HD300T01
400	± 1100	HD400T01
500	± 1200	HD500T01
600	± 1300	HD600T01
1000	± 1500	HD1K0T01

## ● SPECIFICATIONS @ 25° C \*\*

PARAMETERS	VALUES	UNITS
Burden Resistance (R <sub>b</sub> ) <sup>1</sup>	10K (min.)	Ω
Voltage output @ I <sub>pn</sub> (V <sub>out</sub> )	± 4.0 ±0.04	V
Supply Voltage (± 5%)	± 15	V
Current consumption @ ±15V (I <sub>c</sub> )	< 25.0	mA
Isolation Resistance @500V DC (R <sub>is</sub> )	>500	MΩ
Accuracy @ I <sub>pn</sub>	± 1.0	%
Linearity <sup>2</sup>	< 0.5	% of I <sub>pn</sub>
Output offset voltage @ I <sub>p</sub> = 0 (V <sub>off</sub> )	< ± 10.0	mV
Hysteresis offset voltage @ I <sub>primary</sub> = 0, after a primary current of I <sub>pn</sub>	< ± 10.0	mV
Temperature coefficient of V <sub>out</sub> (% of reading)	± 0.05	% / °K
Temperature coefficient of V <sub>off</sub>	± 1.0	mV / °K
Response time 90% of I <sub>pn</sub> step	3.0	μs
Frequency bandwidth @ -3 dB (fbw) <sup>3</sup>	DC to 50	kHz
di/dt accurately followed	50	A/μs
Dielectric strength Primary to o/p terminals	3.5	kVrms
Creepage distance	20.60	mm
Clearance	14.0	mm
Operating Temperature Range	- 25 to + 85	°C
Storage Temperature	- 40 to + 85	°C
Weight	320 (Typical)	g

\*\* Specifications subject to change.

### Note :

1. To use R<sub>b</sub> < 10K Ohms, contact us for more details.
2. Linearity calculation excludes electrical offset.
3. For small signals only.
4. As per customer request the mox connector will be assembled.

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