

Product Data sheet : Hall Effect Current Sensor - HE1K0T02

Date : 07.11.2014

Rev : 01

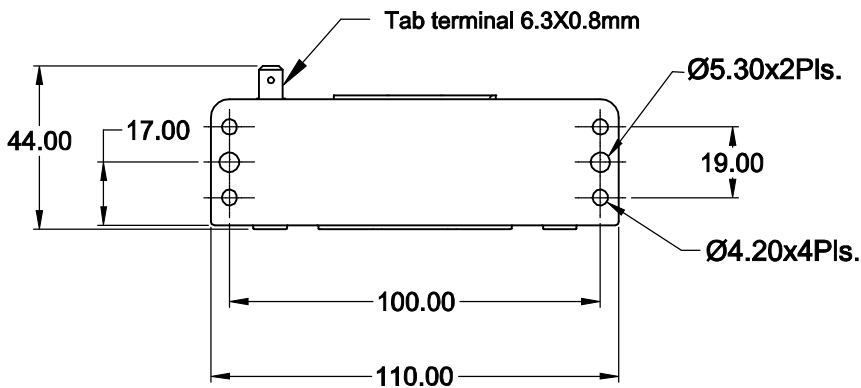
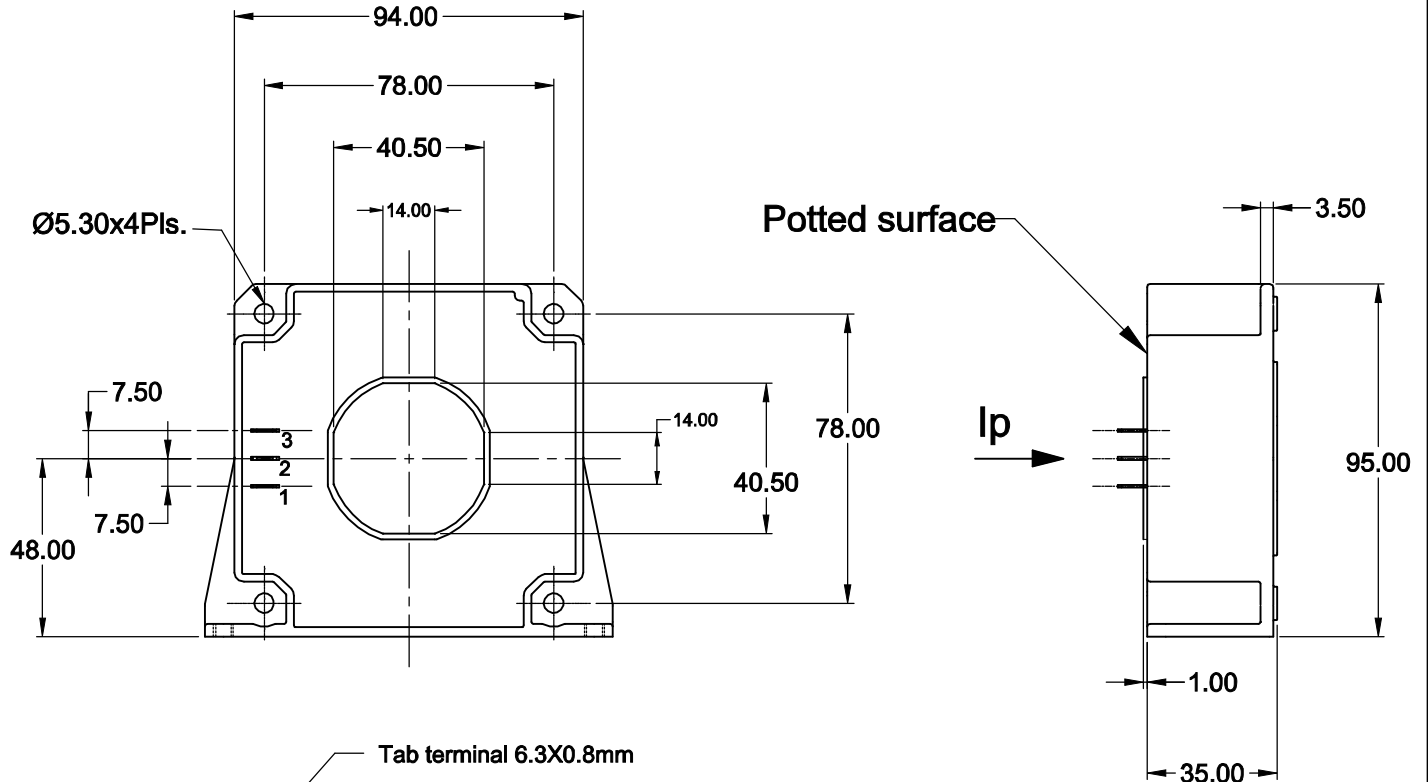
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Customer: ---

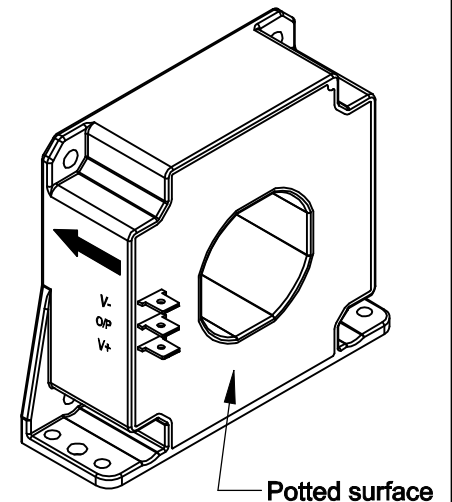
Customer's part No.: ---

 RoHS Compliant

● MECHANICAL DIMENSIONS



- Pin 1 : V+
- Pin 2 : Output (O/P)
- Pin 3 : V-



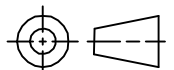
● APPLICATION :

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

● FEATURES :

- Closed loop current sensor.
- Flange mounting type.
- Current output.

GENERAL TOL.
 $\pm 1.0 \text{ mm}$

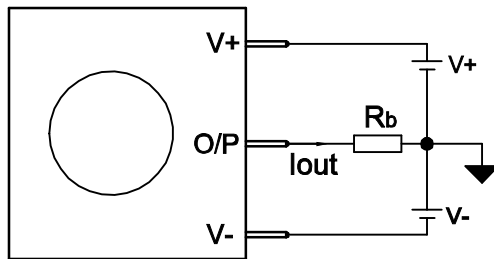


ALL DIMENSIONS
ARE IN 'mm'

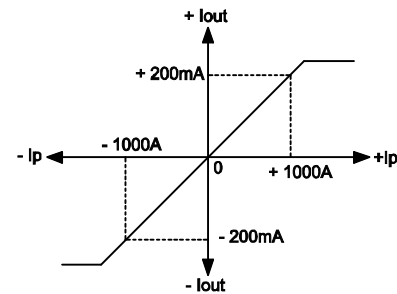
SCALE -NTS

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● CONNECTIONS DIAGRAM



● INPUT & OUTPUT CHARACTERISTICS



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

● SPECIFICATIONS @ 25° C **

PARAMETERS	VALUES	UNITS
Primary Current Nominal (I _{pn})	1000	Arms
Primary current, range (I _p)	± 1500	A
Burden Resistance (R _b)	T _A = 70°C R _b min. R _b max.	Ω
with ± 15 V, @ ± 1000 A	0 18	
@ ± 1200 A	0 7	
with ± 24V, @ ± 1000 A	5 60.5	
@ ± 1500 A	5 24	
Conversion Ratio (K)	5000 : 1	—
Current output @ I _{pn} (I _{out})	200	mA
Supply Voltage (V+ / V-), ±5%	+/- 15 to +/- 24	V
Current consumption @ ±18V (I _c)	26 + I _{out}	mA
Accuracy @ I _{pn}	+/- 0.4	%
Linearity	< 0.1	%
Output offset current @ I _p = 0 (offset)	< ±0.40	mA
Temperature variation of Ioffset (-10 to +85°C)	±0.50 (max.)	mA
Response time 90% of I _{pn} step	< 1.0	µs
Frequency bandwidth @ -3 dB (fbw)	DC to 100	kHz
di/dt accurately followed	> 100	A/µs
Secondary coil resistance	40 (Typical)	Ω
Dielectric strength Pri to Output terminals	3.8	kVrms
Creepage distance	20.60 (min.)	mm
Clearance distance	19.60 (min.)	mm
Operating Temperature Range	- 40 to + 85	°C
Storage Temperature	- 40 to + 85	°C
Weight	550	g

** Specifications subject to change.

Note : - - -