

HCOL03 Series

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



Operating performance (AT =25 °C)

Part No.		HCOL03-101-11
Performance		
Primary nominal r.m.s. current	I_{PN}	100A
Primary current measuring range	I_P	0~±300A
Supply voltage	V_{CC}	4 (±5%) V
Output voltage	V_{OUT}	100V ±5% @± I_{PN} , $R_L = 10K\Omega$
Current consumption	I_C	≤±5.85mA (typ)
Offset voltage	V_O	< ±7mV @ $I_P=0, T_A=25^\circ C$
Thermal drift of V_O	V_{OT}	≤±0.5mV/°C
Thermal drift of V_{OUT}	$TC\epsilon_G$	< ±0.04%/°C
Response time	t_r	< 5μs
Linearity	ϵ_L	≤±2% @0~± I_{PN}
Accuracy	X	±15% @ I_{PN}
Hysteresis offset voltage	I_{OH}	≤±10mV @± $I_{PN} \rightarrow 0$
Isolation voltage	V_d	3KV @50(60)Hz/1min
Frequency bandwidth	f	0~50KHz

General data

Operating temperature	T_A	-25 ~ 85 °C
Storage temperature	T_S	-40 ~ 100 °C
Mass	m	6.5g
Note		Insulated plastic case recognized according to UL 94-V 0

Applications

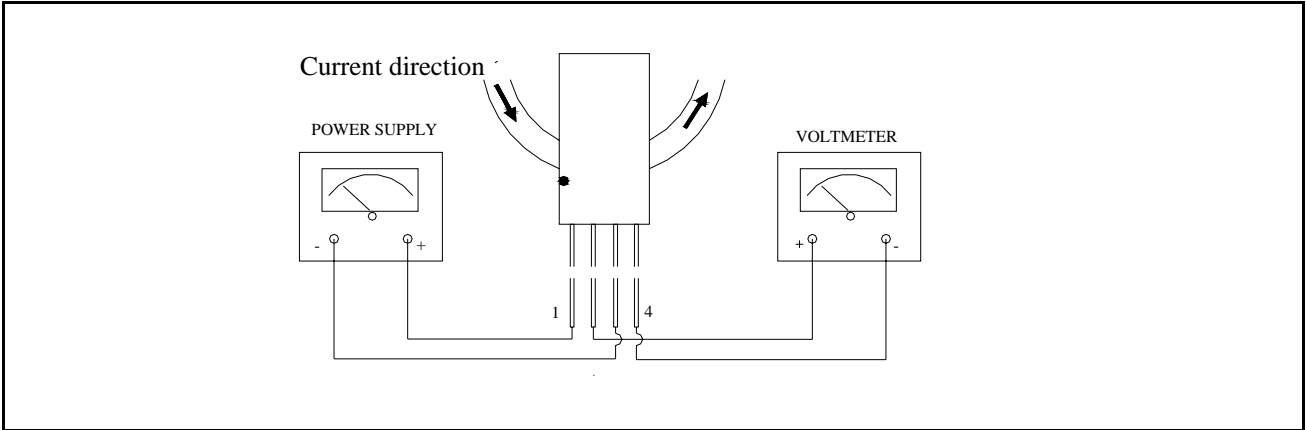
1.AC variable speed drives	4.DC motor drives
2.Battery supplied applications	5.Switched Mode Power Supplies(SMPS)
3.Uninterruptible Power Supplies(UPS)	6.Power supplies for welding applications

Advantages

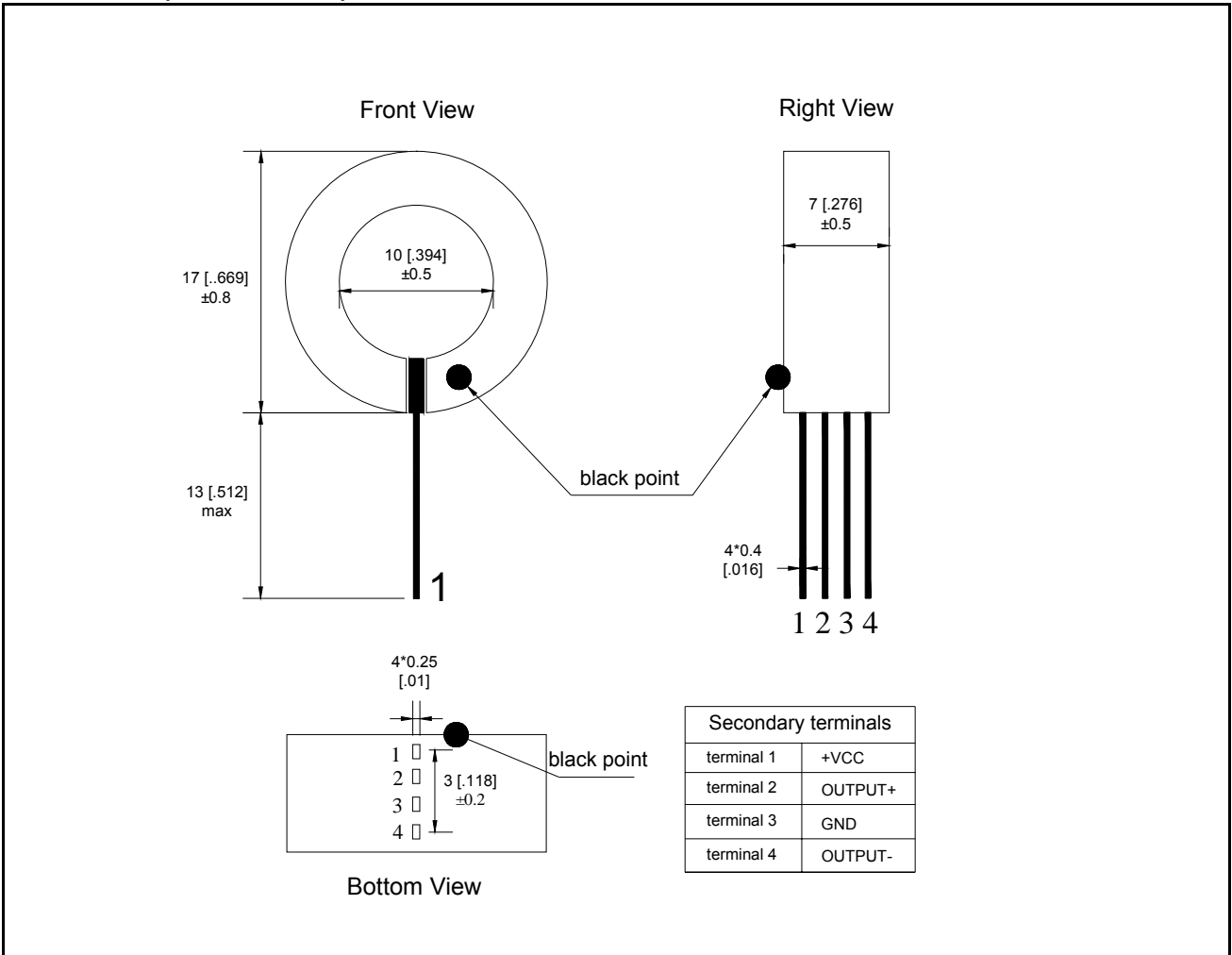
1.Low insertion losses	3.Small size and space saving
2.Easy mounting	4.High immunity to external interference

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Connection



Dimensions (unit: mm/inch)



Remarks

1. V_{OUT} is positive when I_P flows from the direction of the black point.
2. Temperature of the primary conductor should not exceed 100 °C.
3. This is standard model. For different versions (supply voltages, secondary connections, unidirectional measurements, operating temperatures, etc.) please contact us.