

HCOL04 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.		HCOL04-010-11	HCOL04-030-11	HCOL04-050-11	HCOL04-080-11	HCOL04-100-11	HCOL04-250-11	HCOL04-300-11	HCOL04-500-11	HCOL04-101-11
Primary nominal r.m.s. current	I_{PN} (A)	1	3	5	8	10	25	30	50	100
Primary current measuring range	I_P (A)	0~±1	0~±3	0~±5	0~±8	0~±10	0~±25	0~±30	0~±50	0~±100
Supply voltage	V_{CC}	4.5~10.5V _{DC}								
Offset voltage	V_O	$(V_{CC}/2)V \pm 3\%$ @ $I_P=0, T_A=25^\circ C$								
Output voltage	V_{OUT}	4.5V @ $+I_{PN}, V_{CC}=5V, R_L=10K\Omega$ 0.5V @ $-I_{PN}, V_{CC}=5V, R_L=10K\Omega$								
Supply current	I_C	7.2mA (type) 8.5 max @5V, $T_A=25^\circ C$								
Output linearity	ϵ_L	$\leq \pm 1\%$ @0~± I_{PN}								
Sensitivity tolerance	X	$\pm 1\%$ @ I_{PN}								
Thermal drift of V_{OUT}	$TC\epsilon_G$	$< \pm 0.06\%/^\circ C$								
Isolation voltage	V_d	4KV @50(60)HZ/1min								
Rise time	t_r	$< 5\mu s$ @90% I_P								
fall time	t_f	$< 3\mu s$ @10% I_P								
Frequency bandwidth	f	0~50KHz @ $V_{CC}=5V$								

General data

Operating temperature	T_A	-40 ~ 125°C
Storage temperature	T_S	-40 ~ 125°C
Mass	m	<12g
Note		Insulated plastic case recognized according to UL 94-V 0

Applications

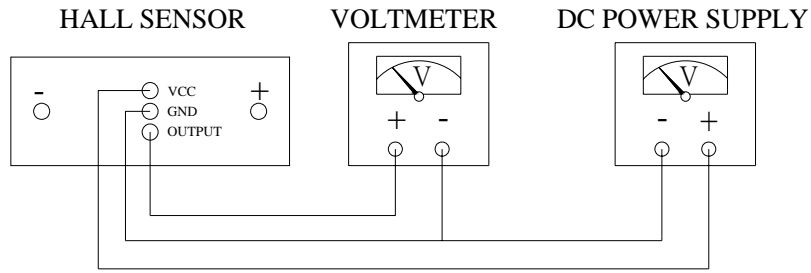
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| 1.AC variable speed drives and servo motor drives | 4.Static converters for DC motor drives |
| 2.Battery supplied applications | 5.Switched Mode Power Supplies(SMPS) |
| 3.Uninterruptible Power Supplies(UPS) | 6.Power supplies for welding applications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

Advantages

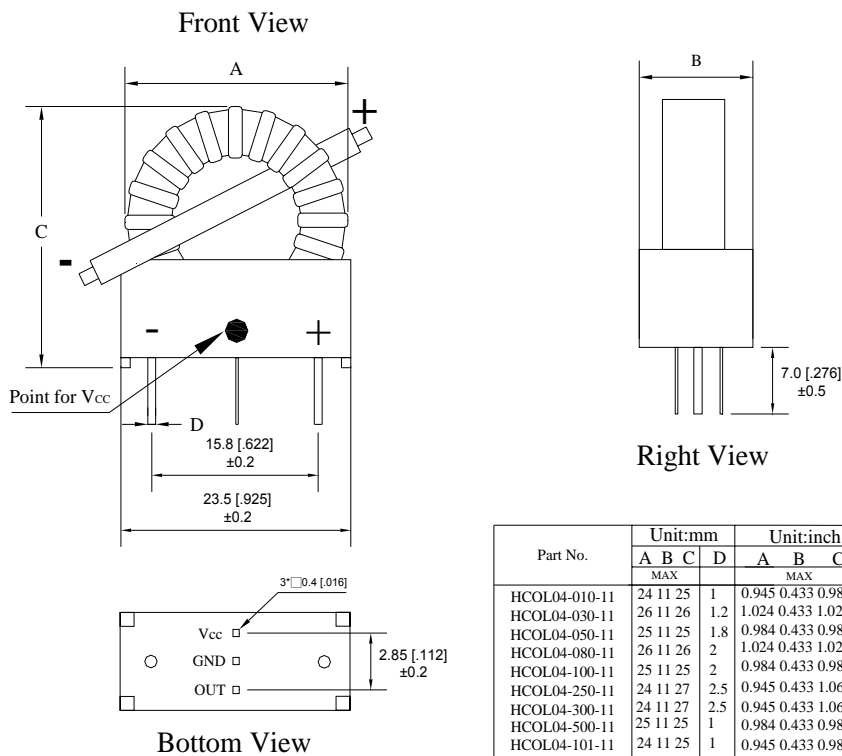
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|---|-----------------------------------|
| 1.Output voltage is isolated from the input | 4.Low power consumption |
| 2.Good linearity | 5.Excellent temperature stability |
| 3.Very low insertion losses | |

HCOL04 Series

Connection



Dimensions (unit: mm/inch)



Note : V_{OUT} is forward when I_P flows from "+" to "-".