

Hall Current Sensor PW-ICS-1 ... 100 $I_{PN}=1...100A$

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.



RoHS COMPLIANT



● Operating performance (AT =25°C)

Model	PW-ICS-1	PW-ICS-3	PW-ICS-5	PW-ICS-8	PW-ICS-10	PW-ICS-25	PW-ICS-30	PW-ICS-50	PW-ICS-100
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}	4.5~10.5								VDC
Offset voltage V_O	(VCC/2)±3% @ $I_P=0, T_A=25^\circ C$								V
Output voltage V_{OUT}	4.5 @ + $I_{PN}, V_{CC}=5V, R_L=10K\Omega$								V
	0.5 @ - $I_{PN}, V_{CC}=5V, R_L=10K\Omega$								V
Supply current I_C	7.2 type 8.5 max@5V, $T_A=25^\circ C$								mA
Output linearity ϵ_L	$\leq \pm 1$ @0~± I_{PN}								%
Sensitivity tolerance X	± 1 @ I_{PN}								%
Thermal drift of V_{OUT} $TC\epsilon_G$	$< \pm 0.06$								%/°C
Isolation voltage V_d	4 @50(60)HZ/1min								KV
Rise time t_r	< 5 @90% I_P								μs
fall time t_f	< 3 @10% I_P								μs
Frequency bandwidth f	0~50 @ $V_{CC}=5V$								KHz

● General data

Operating temperature T_O	-40~+125°C
Storage temperature T_S	-40~+125°C
Mass m	< 12g
Note	Insulated plastic case recognized according to UL 94-V0

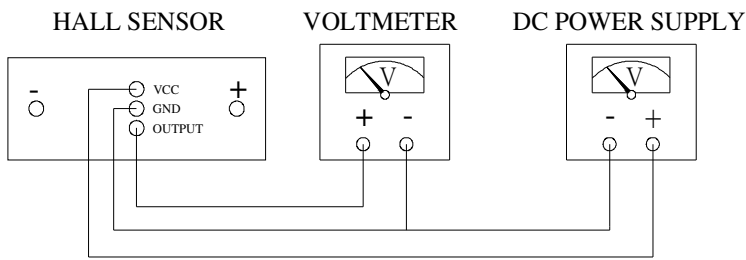
● Applications

- | | |
|---|---|
| ◆ AC variable speed drives and servo motor drives | ◆ Static converters for DC motor drives |
| ◆ Battery supplied applications | ◆ Switched Mode Power Supplies (SMPS) |
| ◆ Uninterruptible Power Supplies (UPS) | ◆ Power supplies for welding applications |

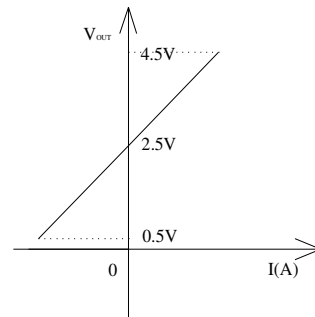
● Advantages

- | | |
|---|-----------------------------------|
| ◆ Output voltage is isolated from the input | ◆ Low power consumption |
| ◆ Good linearity | ◆ Excellent temperature stability |
| ◆ Very low insertion losses | |

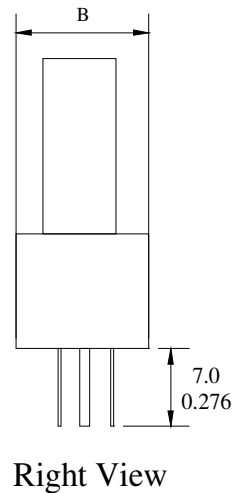
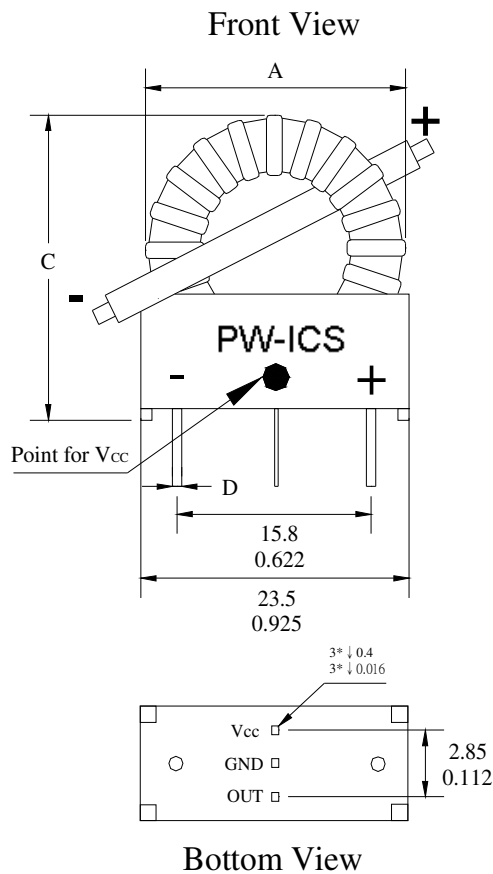
● **Connection**



● **Curve Figure**



● **Dimensions (unit: mm/inch)**



Part Number	Unit: mm				Unit: inch				Measurement ²
	A	B	C	D	A	B	C	D	
PW-ICS-1	24	11	25	1	0.945	0.433	0.984	0.039	intrusive
PW-ICS-3	26	11	26	1.2	1.024	0.433	1.024	0.047	intrusive
PW-ICS-5	25	11	25	1.8	0.984	0.433	0.984	0.071	intrusive
PW-ICS-8	26	11	26	2	1.024	0.433	1.024	0.079	intrusive
PW-ICS-10	25	11	25	2	0.984	0.433	0.984	0.079	intrusive
PW-ICS-25	24	11	27	2.5	0.945	0.433	1.063	0.098	intrusive
PW-ICS-30	24	11	27	2.5	0.945	0.433	1.063	0.098	intrusive
PW-ICS-50	25	11	25	1	0.984	0.433	0.984	0.039	non intrusive
PW-ICS-100	24	11	25	1	0.945	0.433	0.984	0.039	non intrusive

Tol: 0.3mm/0.012inch

NOTE :

1. V_{OUT} is forward when IP flows from "+" to "-".
2. Intrusive: the primary current flows from the "+" pin to the "-" pin through the sensor.
Non intrusive: the primary cable must be fed through the aperture of the sensor.

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