

# Hall Current Sensor PW-ICS-0.1 ... 46-SW

$I_{PN}=0.1..46A$

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 ( $AT=25^{\circ}C$ )

Operating current	Release current	Part Number
$I_{OP}$ (A)	$I_{REL}$ (A) type	
0.1±0.005	0.065	PW-ICS-0.1-SW
0.2±0.015	0.130	PW-ICS-0.2-SW
0.3±0.03	0.200	PW-ICS-0.3-SW
0.4±0.04	0.260	PW-ICS-0.4-SW
0.5±0.05	0.325	PW-ICS-0.5-SW
0.75±0.075	0.550	PW-ICS-0.75-SW
1±0.1	0.730	PW-ICS-1-SW
2±0.2	1.750	PW-ICS-2-SW
3±0.3	2.600	PW-ICS-3-SW
4±0.5	3.500	PW-ICS-4-SW
5±0.75	4.350	PW-ICS-5-SW
46	40.00	PW-ICS-46-SW

Supply voltage	$V_{CC}$	4.5~24	VDC
Output current	$I_{OUT}$	< 25	mA
Operating output voltage	$V_{OUT(ON)}$	0.2	Vdc
Cut-off output voltage	$V_{OUT(OFF)}$	$V_{CC}$	Vdc
Supply current	$I_C$	4.4type 9 max@TA=25°C	mA
Output rise time	$T_r$	0.04	µs
Output fall time	$T_f$	0.18	µs
Isolation voltage	$V_d$	2.5 @50(60)HZ/1min	KV
Frequency bandwidth	f	0~20 @ $V_C=10V$	KHz

## ● General data

Operating temperature	$T_O$	-40~+125	°C
Storage temperature	$T_S$	-40~+125	°C
Mass	m	< 16	g
Note	Insulated plastic case recognized according to UL 94-V0		

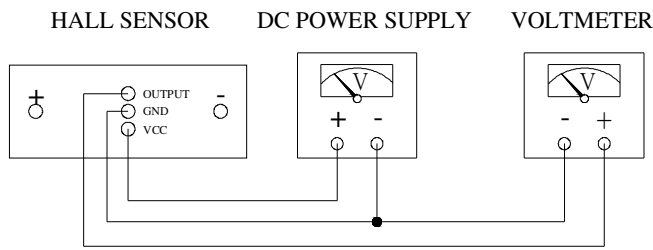
## ● Applications

◆ Battery supplied applications	◆ Switched Mode Power Supplies (SMPS)
◆ Uninterruptible Power Supplies (UPS)	◆ Power supplies for welding applications

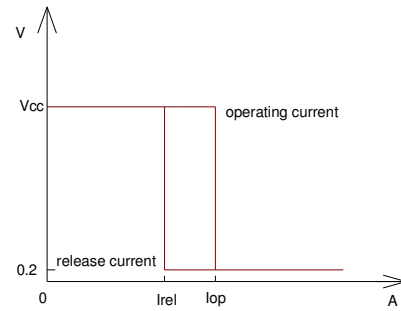
## ● Advantages

◆ Output voltage is isolated from the input	◆ Excellent temperature stability
◆ Senses DC or AC current	◆ Very low insertion losses

● **Connection**

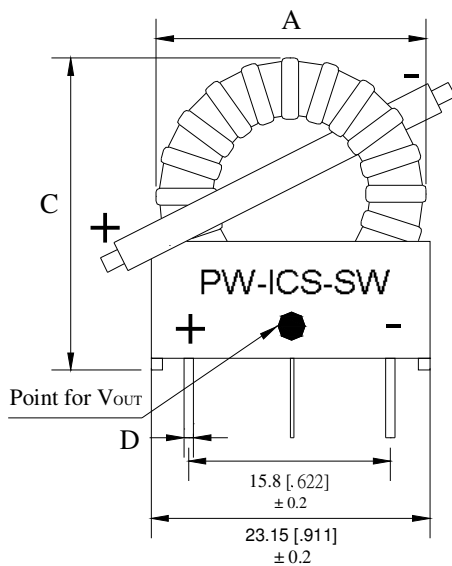


● **Curve Figure**

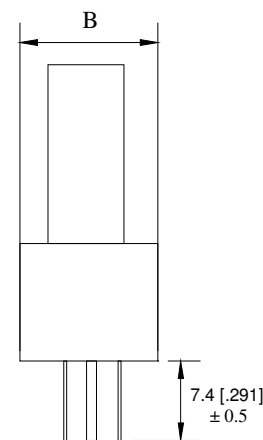


● **Dimensions (unit: mm/inch)**

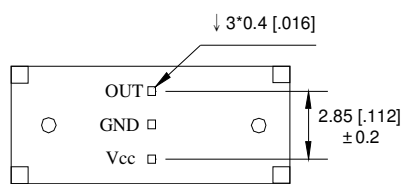
Front View



Right View



Bottom View



PART NUMBER	Unit: mm				Unit: inch				Measurement <sup>2</sup>
	A	B	C	D	A	B	C	D	
PW-ICS-0.1-SW	24	11	27	1	0.945	0.433	1.063	0.039	intrusive
PW-ICS-0.2-SW	24	11	27	1	0.945	0.433	1.063	0.039	intrusive
PW-ICS-0.3-SW	24	11	27	1	0.945	0.433	1.063	0.039	intrusive
PW-ICS-0.4-SW	24	11	27	1	0.945	0.433	1.063	0.039	intrusive
PW-ICS-0.5-SW	24	11	27	1	0.945	0.433	1.063	0.039	intrusive
PW-ICS-0.75-SW	24	11	27	1	0.945	0.433	1.063	0.039	intrusive
PW-ICS-1-SW	24	11	27	1	0.945	0.433	1.063	0.039	intrusive
PW-ICS-2-SW	25	11	27	1	0.984	0.433	1.063	0.039	intrusive
PW-ICS-3-SW	25	11	27	1	0.984	0.433	1.063	0.047	intrusive
PW-ICS-4-SW	25	11	27	1	0.984	0.433	1.063	0.055	intrusive
PW-ICS-5-SW	25	11	27	2	0.984	0.433	1.063	0.063	intrusive
PW-ICS-46-SW	24	11	26	1	0.945	0.433	1.063	0.039	non intrusive

**remarks:**

1. Vout 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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