



HP-PU



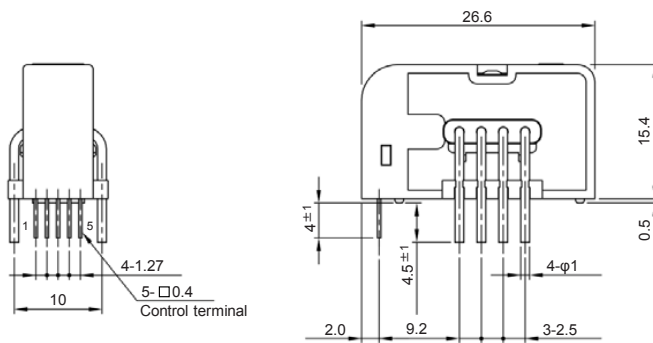
- Rated current 5A ~ 100A
- Compact and small mounting area by application of Hall IC
- Excellent in temperature characteristics by incorporating temperature compensation circuit
- Superior noise-resistance

Applications

Inverters, Servo drivers, Power supply equipment, Uninterruptible power supply (UPS), NC machine tools, Welders

Dimensions

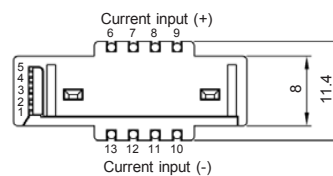
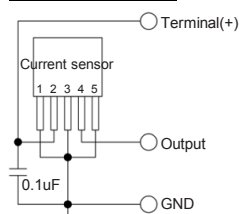
(mm)



How to connect current input terminal

Number of turns	How to connect PCB side
1T specification	(+ side) 6 7 8 9 (- side) 13 12 11 10
2T specification	(+ side) 6 7 8 9 (- side) 13 12 11 10
4T specification	(+ side) 6 7 8 9 (- side) 13 12 11 10

Circuit connection diagram



- Terminal No.
- 1 ... GND
 - 2 ... (+) terminal
 - 3 ... GND
 - 4 ... Output
 - 5 ... GND
 - 6 ... (+) input
 - 7 ... (+) input
 - 8 ... (+) input
 - 9 ... (+) input
 - 10 ... (-) input
 - 11 ... (-) input
 - 12 ... (-) input
 - 13 ... (-) input

Weight : 8g

General tolerance: ±0.5 * Connect capacitors around the current sensor terminal.

Specification

Ta=25°C

Type	HP-PU005V15PP5	HP-PU010V15PP5	HP-PU025V15PP5	HP-PU050V15PP5	HP-PU100V15PP5
Rated current [If]	±5A	±10A	±25A	±50A	±100A
Continuously flowing DC current	±5A	±10A	±25A	±50A	±55A
Saturation current [Is]	±7.3A	±14.6A	±36.5A	±73A	±146A
Linearity limits	0~±6.5A	0~±13A	0~±32.5A	0~±65A	0~±130A
Number of current input terminal turns	4	4	2	1	1
Rated output [Vh]	$V0 \pm 1.5V \times (Vcc/5) \pm 3.5\%$				$V0 \pm 1.5V \times (Vcc/5) \pm 2.5\%$
Residual output [Vo]	Within (Vcc/2)±40mV	Within (Vcc/2)±35mV			Within (Vcc/2)±30mV
Output linearity	Within ±1%				
Response time	Within 10μs (at di/dt=If/μs)				
Response performance	Within 10%				
Hysteresis voltage range	Within 80mV	Within 75mV	Within 70mV		Within 50mV
Output Temp. Coef.	Within ±0.05%/°C				
Residual output Temp. Coef.	Within ±0.75mV/°C	Within ±0.65mV/°C	Within ±0.6mV/°C		Within ±0.3mV/°C
Control power supply	+5V±5%				
Consumption current	Within 15mA				
Operating Temp.	-40°C~+85°C				
Storage Temp.	-40°C~+85°C				
Dielectric withstand voltage	2500V AC 50/60Hz 1minute				
Insulation resistance	Not less than 500MΩ 500V DC				

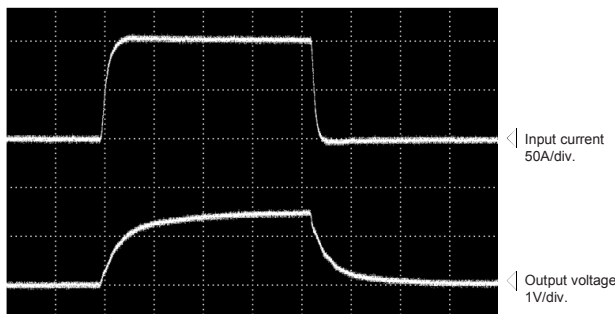
- Note1) The indicated residual output is the one after the core hysteresis is removed.
- Note2) The output specification is the maximum output current 0.5mA or less, load capacity 100pF or less.
- Note3) The rated output and residual output vary with the value of the control power because they are ratiometric outputs.
- Note4) Connect to the board at the specified number of turns. A different number of turns will result in an output error.

Characteristics chart

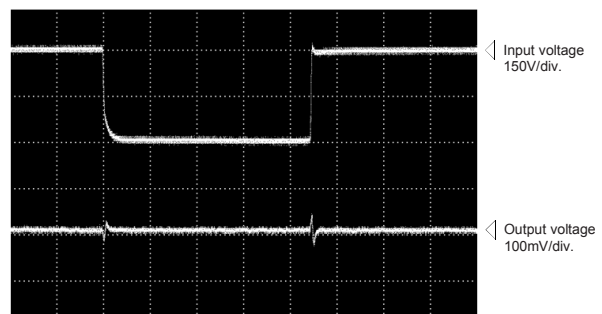
HP-PU100V15PP5

Time base: 5μs/div.

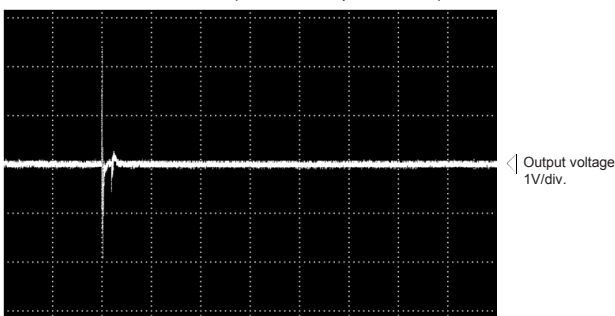
Pulse current response characteristic



Noise characteristics (Effects of dv/dt)

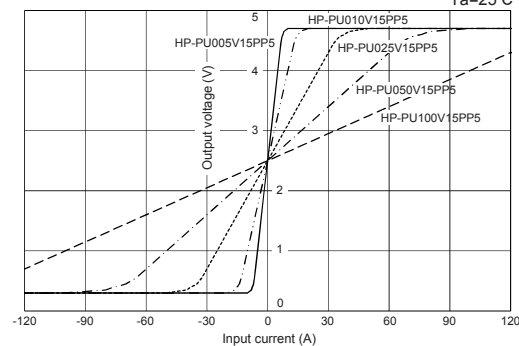


Noise characteristics (Effects of impulse noise)



Input/output characteristics

Ta=25°C



Note: The marks "◁" means 0V or 0A.