

HC-PGA



- Rated current 50A ~ 400A
- High precision realized with adoption of dedicated ASIC
- Superior noise-resistance
- Small temperature drift as a result of built-in temperature correction circuit

Applications

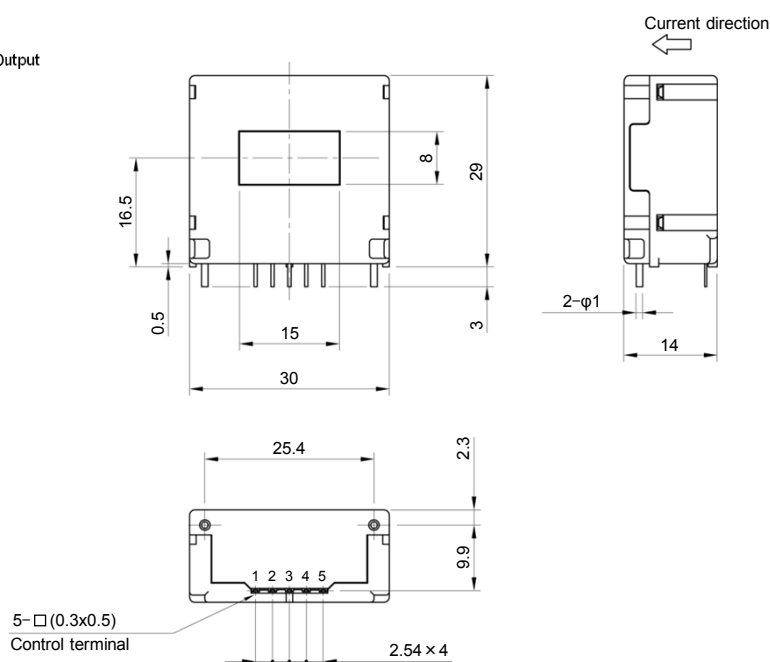
Inverters, Servo drivers, Power supply equipment, Uninterruptible power supply (UPS), Welders, Photovoltaic generation

Dimensions

(mm)

Terminal No.	1 ... NC
	2 ... Vcc
	3 ... Output
	4 ... Reference Voltage Output
	5 ... GND

Weight : 26g



General tolerance: ±0.5

Specification

Ta=25°C

Type	HC-PGA050V08PP5B	HC-PGA100V08PP5B	HC-PGA200V08PP5B	HC-PGA300V08PP5B	HC-PGA400V08PP5B
Rated current [If]	± 50A	± 100A	± 200A	± 300A	± 400A
Saturation current [Is]	± 131A	± 262A	± 525A	± 787A	± 900A
Linearity limits	0 ~ ± 125A	0 ~ ± 250A	0 ~ ± 500A	0 ~ ± 750A	0 ~ ± 800A
Reference voltage output [Vref] (I=0)	+2.5V±15mV				
Rated output RL=10kΩ [Vh] (I=If, Output-Vref)	V0±0.8V±1.5%				
Residual output [V0] (I=0, Output-Vref)	Within ±32mV	Within ±27mV			
Output linearity	Within ±0.5%				
Response time	Within 5μs (If < 100A: di/dt=If/μs, If ≥ 100A: di/dt=100A/μs)				
Response performance	Within 10%				
Hysteresis voltage range	Within 15mV				
Output Temp. Coef.	Within ±0.04%/°C				
Residual output Temp. Coef.	Within ±0.2mV/°C				
Reference voltage output Temp. Coef.	Within ±0.03%/°C				
Control power supply [Vcc]	+5V±5%				
Consumption current	Within 15mA				
Operating Temp.	-40°C~+105°C				
Storage Temp.	-40°C~+105°C				
Dielectric withstand voltage	4000V AC 50/60Hz 1minute				
Insulation resistance	Not less than 500MQ 500V DC				

Note1) The indicated residual output is the one after the core hysteresis is removed.

Note2) Output (Vout) specifications include 100Ω output resistance and 2mA maximum output current.

Reference voltage output (Vref) specifications include 1kΩ output resistance and 2mA maximum output current.

Note3) In this specification, accuracy was determined with reference to the reference voltage (Vref).

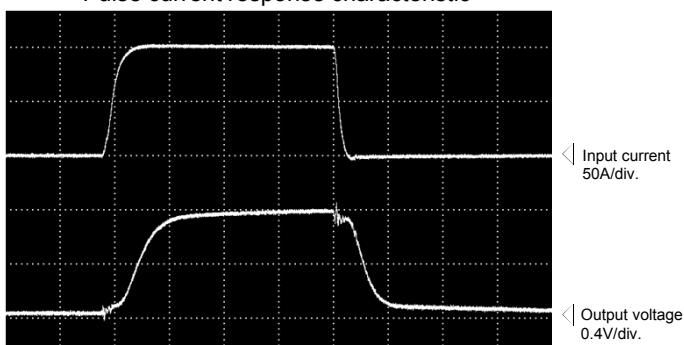
Please note that reference voltage error and reference voltage temperature characteristics are added when the reference voltage is not used.

Characteristics chart

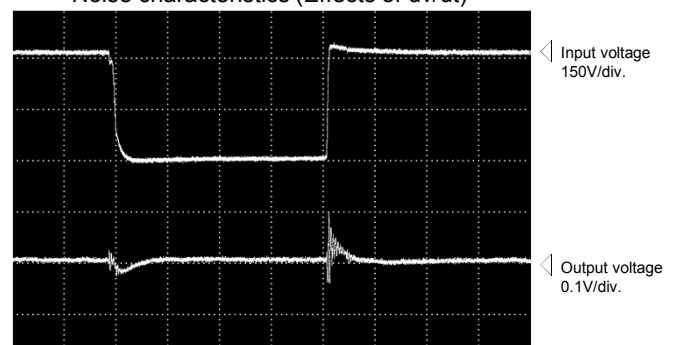
HC-PGA100V08PP5B

Time base: 5μs/div.

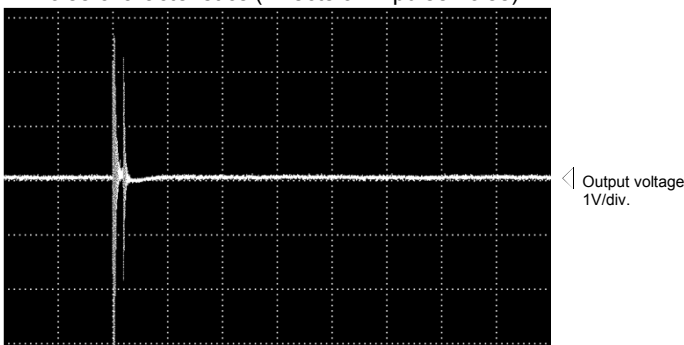
Pulse current response characteristic



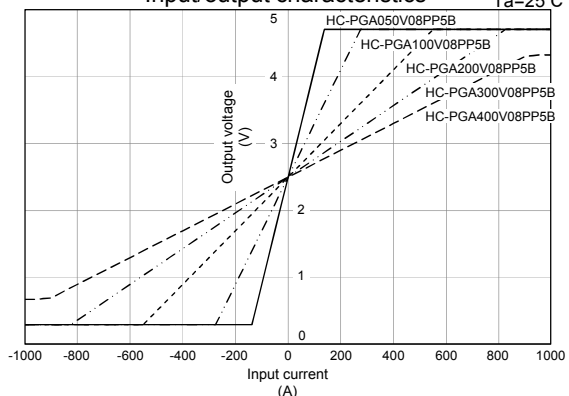
Noise characteristics (Effects of dv/dt)



Noise characteristics (Effects of impulse noise)



Input/output characteristics



Note: The marks "◁" means 0V or 0A.