

HC-ASB



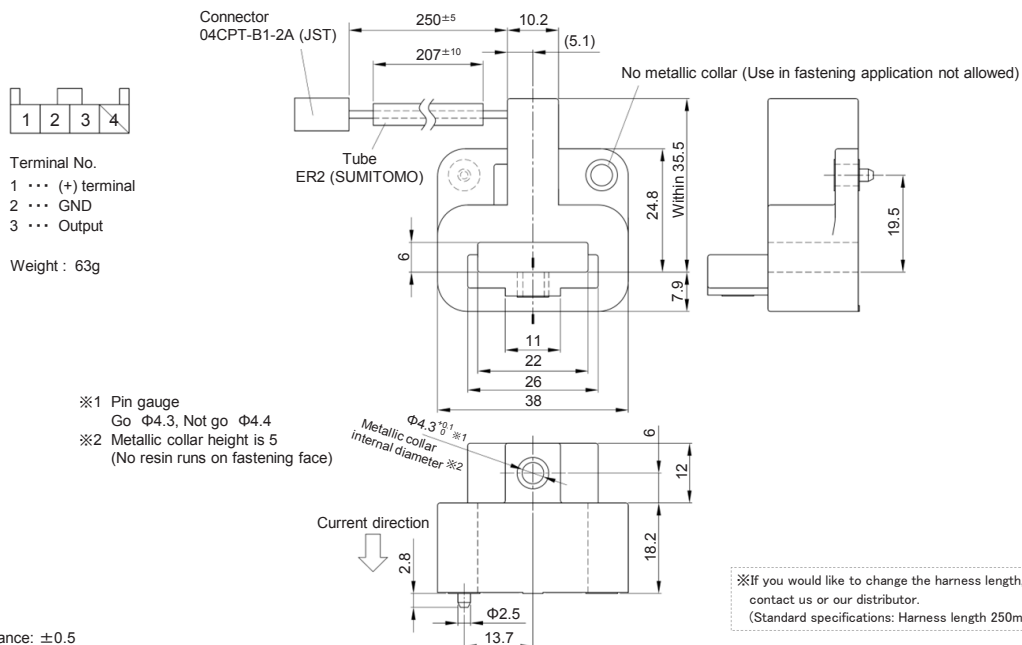
- Rated current 200A ~ 800A
- Small size handles large current (MAX 800A)
- Ensures broad operating temperature range (-40°C ~ +125°C)
- 5V single power supply ratio metric specifications
- Attached to bus-bar, cable output specifications

Applications

HEV inverters, EV inverters, Current detection in on-board devices

Dimensions

(mm)



Specification

Ta=25°C

| Type | HC-ASB200V2PP5-16 | HC-ASB400V2PP5-16 | HC-ASB600V2PP5-16 | HC-ASB800V2PP5-16 |
|---|--------------------------------|---|-------------------|-------------------|
| Rated current [If] | ±200A | ±400A | ±600A | ±800A |
| Saturation current [Is] | ±220A | ±440A | ±660A | ±880A |
| Linearity limits | 0~±200A | 0~±400A | 0~±600A | 0~±800A |
| Rated output [Vh] | I=+If | Within $V_0+2V \times (V_{cc}/5) \pm 1.5\%$ (RL=10kΩ) | | |
| | I=-If | Within $V_0-2V \times (V_{cc}/5) \pm 1.5\%$ (RL=10kΩ) | | |
| Residual output [V0] | Within $V_{cc}/2 \pm 30mV$ | | | |
| Output linearity | Within ±1% | | | |
| Response time | Within 10μs (at di/dt=100A/μs) | | | |
| Response performance | Within 10% | | | |
| Hysteresis voltage range | Within 30mV | Within 22mV | Within 16mV | Within 13mV |
| Output Temp. Coef. | Within ±0.04%/°C | | | |
| Residual output Temp. Coef. | Within ±1mV/°C | Within ±0.6mV/°C | Within ±0.5mV/°C | Within ±0.4mV/°C |
| Control power supply [Vcc] | +5V±4% | | | |
| Power variation characteristics change [+5V±4%] | I=±If | 3.5~4.5% | | |
| | I=0 | 3.2~4.8% | 3.5~4.5% | |
| Consumption current | Within 30mA | | | |
| Operating Temp. | -40°C~+125°C | | | |
| Storage Temp. | -40°C~+125°C | | | |
| Dielectric withstand voltage | 2500V AC 50/60Hz 1minute | | | |
| Insulation resistance | Not less than 500MΩ 500V DC | | | |

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

Note2) Output specifications include 100-Ω output resistance and 1-mA maximum output current.

Note3) Since residual output is ratiometric output, it varies according to the control power supply value.

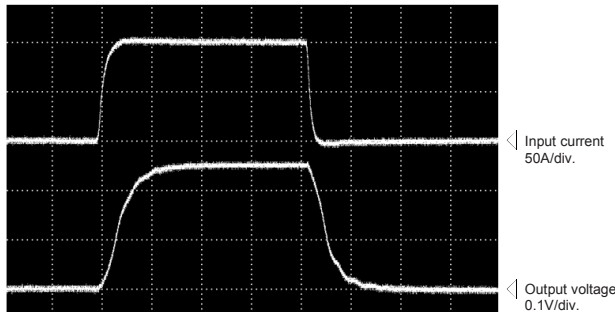
Note4) Code at the end of the model name represents harness specifications.

Characteristics chart

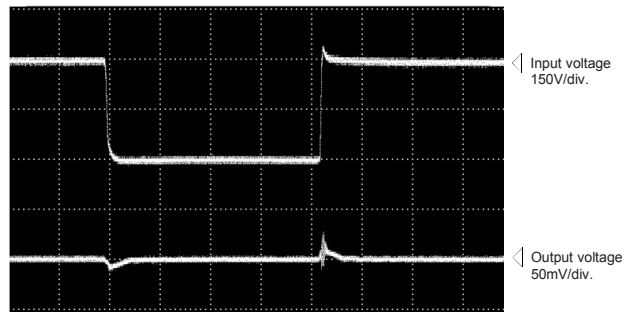
HC-ASB800V2PP5-16

Time base: 5μs/div.

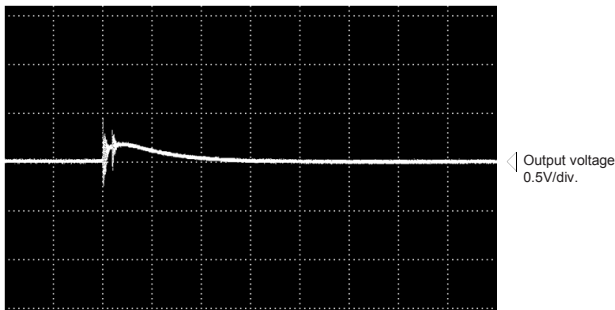
Pulse current response characteristic



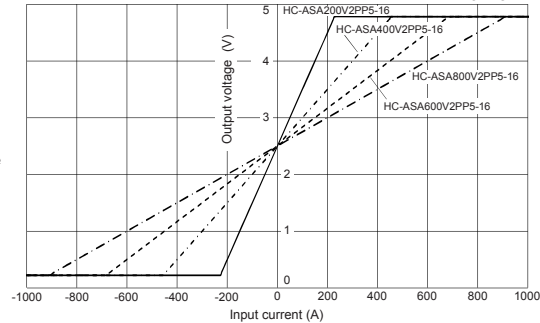
Noise characteristics (Effects of dv/dt)



Noise characteristics (Effects of impulse noise)



Input/output characteristics



Note: The marks "◁" means 0V or 0A.