HD–TS

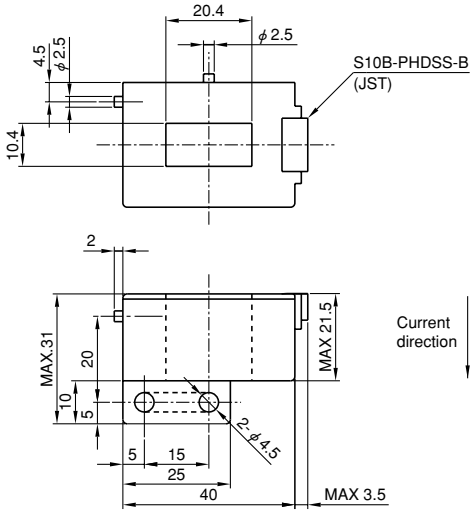
- Rated current ·····100A ～ 600A
- Δ–Σ (delta-sigma) modulation digital output sensors excelling in the anti-noise characteristic.
- It is possible to simplify the circuits on the input side as the input side requires no A/D conversion.

Applications

Inverters, servo drivers, power supply equipment, uninterruptible power supply (UPS), NC machine tools, welders

Dimensions

(mm)



Terminal No. 1···GND
2···(+) terminal
3···GND
4···(+) terminal
5···+MDAT
6···-MDAT
7···+MCLK
8···-MCLK
9···Analog Output
10···Analog Output GND

Weight : 44g

Specification

Ta=25°C

Type	HD-TS100V027P5	HD-TS200V027P5	HD-TS300V027P5	HD-TS400V027P5	HD-TS500V027P5	HD-TS600V027P5
Rated current [If]	±100A	±200A	±300A	±400A	±500A	±600A
Saturation current [Is]	±119A	±237A	±356A	±474A	±593A	±711A
Linearity limits	0~±119A	0~±237A	0~±356A	0~±474A	0~±593A	0~±711A
Base Data	±16384[data] (In saturated current (Is))					
Rated output data [Vh]	±13824[data] Within ±491[data] (In rated current (If))					
Residual output data [Vo]	Within ±164[data]					
Output linearity	Within ±1% (Within ±164[data])					
Response time	Within 20μs (at di/dt = 100 A/μs)					
Hysteresis voltage range	Within ±164[data]					
Output Temp. Coef.	Within ±0.1%/°C					
Residual output Temp. Coef.	Within ±51[data]/°C					
Control power supply	±5V±5%					
Consumption current	Within 50mA					
Operating Temp.	–10°C~+80°C					
Storage Temp.	–15°C~+85°C					
Dielectric withstand voltage	2500V AC 50/60Hz 1minute					
Insulation resistance	Not less than 500MΩ 500V DC					
Output specifications	TIA/EIA-422-B[RS422] standard serial output (data and clock output)					
Output clock frequency	10MHz±2MHz					
Others	△–Σ A/D converter Built-in Type ※) All the data number shall be the values at 14bit(16384[data]) in resolution.					

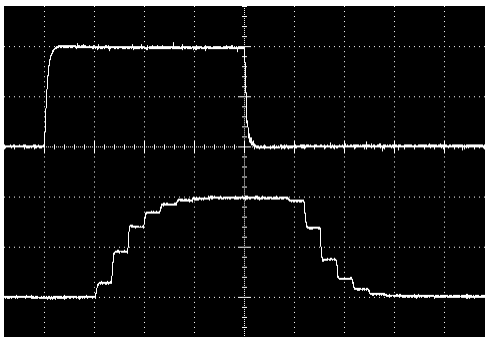
Note1) The indicated residual voltage is the one after the core hysteresis is removed.

Characteristics chart

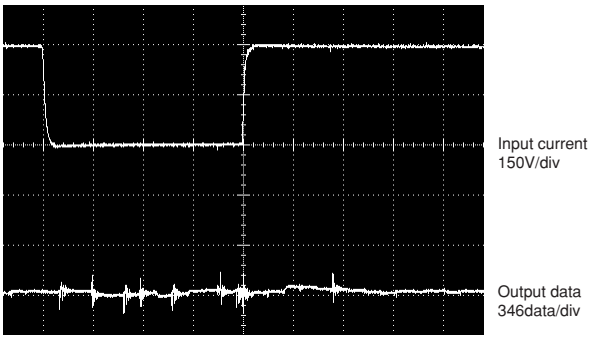
HD-TS200V027P5

Time base: 10µs/div.

Pulse current response characteristic



Noise characteristics (Effects of dv/dt)



Input/output characteristics Ta=25℃