dgseals.com
6505 W. Park Blvd • Suite 306 PMB 356 • Plano, TX 75093
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KOHSHIN
HS-U series

RoHS compliant

Medium current range
Bolt on type

HS-U

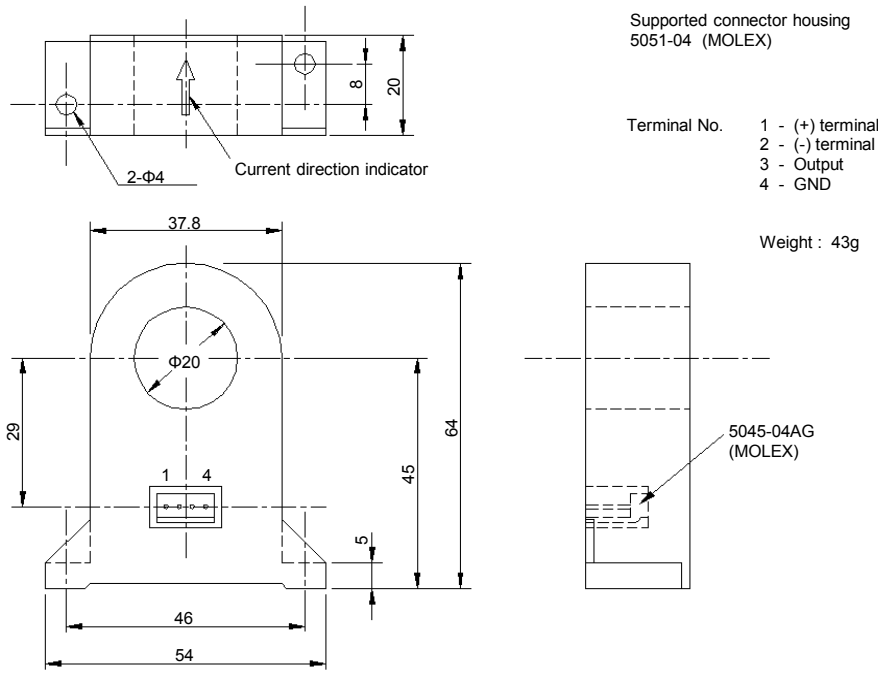
- Rated current 50A ~ 300A
- Superior in response, linearity and temperature characteristics
- Both the voltage output and the current output were prepared
- ±12 Volt version also available

Applications

Inverters, Servo drivers, Power supply equipment, NC machine tools

Dimensions

(mm)



Supported connector housing
5051-04 (MOLEX)

Terminal No.
1 - (+) terminal
2 - (-) terminal
3 - Output
4 - GND

Weight : 43g

General tolerance: ±0.5

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Specification

Ta=25℃

	Voltage output type			Current output type		
Type	HS-U050V4B15	HS-U100V4B15	HS-U300V4B15	HS-U050A005B15	HS-U100A005B15	HS-U300A015B15
Rated current [If]	±50A	±100A	±300A	±50A	±100A	±300A
Continuously flowing DC current	±50A	±100A	±150A	±50A	±100A	±300A
Saturation current [Is]	±150A	±300A	±390A	±150A	±300A	±300A
Linearity limits	0~±150A	0~±300A	0~±360A	0~±150A (RL=50Ω)	0~±300A (RL=20Ω)	0~±300A (RL=20Ω)
Rated output [Vh,	±4V±1% (RL=10kΩ)			±50mA±1%		±150mA±1
Residual output [V0,	Within ±20mV			Within ±0.2mA		
Output linearity	Within ±0.5%					
Second coil resistance	Approx. 25Ω	Approx. 50Ω		Approx. 25Ω	Approx. 50Ω	
Response time	Within 1μs (The smaller one on either at di/dt = 100A/μs or If/μs.)					
Response performance	Within 10%					
Hysteresis voltage range	Within 20mV			Within 0.2mA		
Output Temp. Coef.	Within ±0.02%/℃					
Residual output Temp. Coef.	Within ±1mV/℃			Within ±0.01mA/℃		
Control power supply	±15V±5%					
Consumption current	20mA+(Input current/1000)	20mA+(Input current/2000)		20mA+(Input current/1000)	20mA+(Input current/2000)	
Operating Temp.	-10℃~+80℃					
Storage Temp.	-15℃~+85℃					
Dielectric withstand voltage	2500V AC 50/60Hz 1minute					
Insulation resistance	Not less than 500MΩ 500V DC					

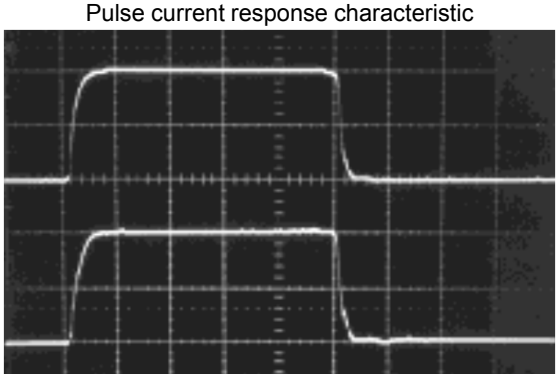
Note1) The indicated residual output is the one after the core hysteresis is removed.
Note2) Energization time of saturation current shall be within 1 second.
Note3) Energization time of continuous live DC current x150% shall be within 1 minute.

Characteristics chart

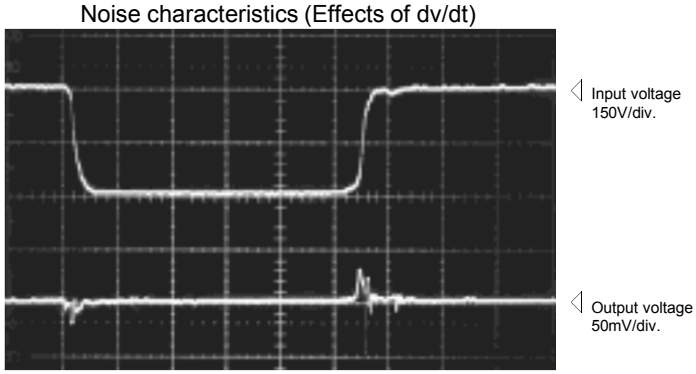
HS-U100A005B15 (RL=20Ω)

Time base: 5μs/div.

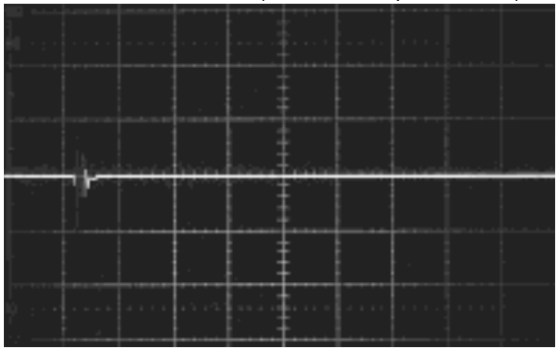
Pulse current response characteristic



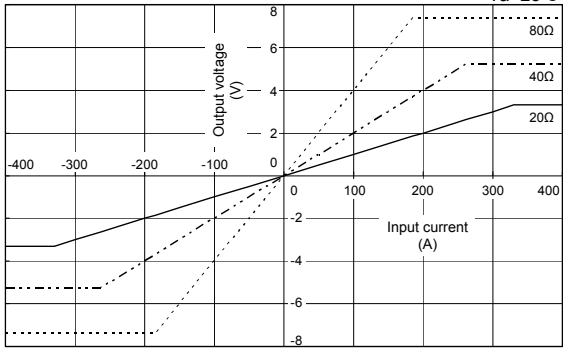
Noise characteristics (Effects of dv/dt)



Noise characteristics (Effects of impulse noise)



Load resistance-output characteristics (Current output type) Ta=25℃



Note: The marks " ◁ " means 0V or 0A.