



Hall Effect Current Sensors L06P***S05 Series

Features:

- Open Loop type
- Printed circuit board mounting
- Horizontal mounting
- Unipolar power supply
- Industrial temperature range
- Mounting pins
- Insulated plastic case according to UL94V0

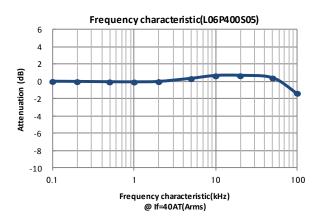
Advantage:

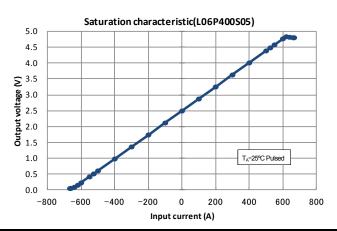
- Excellent accuracy and linearity
- Wide nominal current range
- Low temperature drift
- Wide frequency bandwidth
- No insertion loss
- High Immunity To External Interference
- Optimised response time
- Current overload capability

Specifications T _A =25°C, V _C					
Parameters	Symbol	L06P400S05	L06P600S05	L06P800S05	
Primary nominal current	I _f	400AT	600AT	800AT	
Saturation current	I _{fmax}	≥ ± If x 1.33			
Rated output voltage	Vo	V _{of} +1.5V ± 0.035V (at lf)			
Offset voltage ¹	$V_{ m of}$	V _{REF} ¹ ± 30mV (at If = 0A)			
Output linearity ² (0A~If)	٤٤	≤ ± 1% (at If)			
Power supply voltage	V _{cc}	+ 5V ± 0.1V			
Consumption current	Icc	≤ 15mA			
Response time ³	t _r	≤ 5µs (at di/dt = 100A / µs)			
Thermal drift of gain ⁴	TcVo	≤ ± 1.5mV/°C			
Thermal drift of offset	TcVof	≤ ± 1.0 mV/°C			
Hysteresis error	V _{OH}	≤ 10mV (at If = 0A→If →0A)			
Insulation voltage	V _d	AC2500V for 1minute (sensing current 0.5mA), inside of through hole ⇔ terminal			
Insulation resistance	R _{IS}	≥ 500MΩ(at DC500V), inside of through hole ⇔ terminal			
Ambient operation temperature	T _A	-40°C~+85°C			
Ambient storage temperature	Ts	-40°C~+85°C			

¹ V_{REF} = V_{CC} / 2 (ratiometric). After removal of core hysteresis— ² Without offset— ³ Time between 90% input current full scale and 90% of sensor output full scale— 4 Without Thermal drift of offset

Electrical Performances





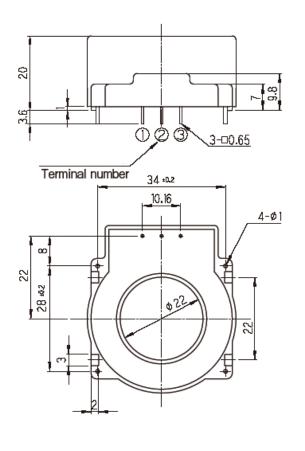






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Mechanical dimensions

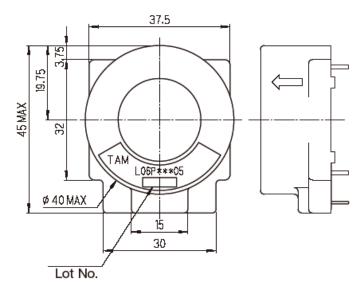


NOTES

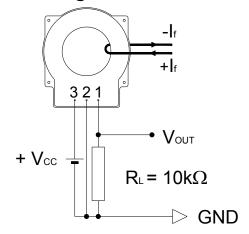
- 1. Unit is mm
- 2. Tolerance is 0.5mm

Terminal Number:

- 1: V_{OUT}
- 2: GND
- 3: +V_{CC}(+5V)



Electrical connection diagram



Package & Weight Information

Weight	Pcs/box	Pcs/carton	Pcs/pallet
65g	100	500	4800





Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Tamura:

L06P400S05 L06P300S05 L06P500S05 L06P600S05 L06P700S05 L06P800S05