Hall Effect Current Sensors L03S***D15WM Series

Features:

- Open Loop type
- Panel mounting
- Molex connector
- Improved mounting
- Insulated plastic case according to UL94V0

Advantage:

- Excellent accuracy and linearity
- Low temperature drift
- Wide frequency bandwidth
- No insertion loss
- High Immunity To External Interference
- Current overload capability

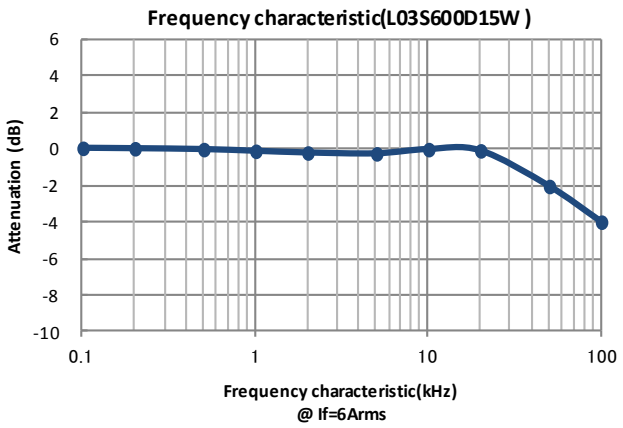
Specifications

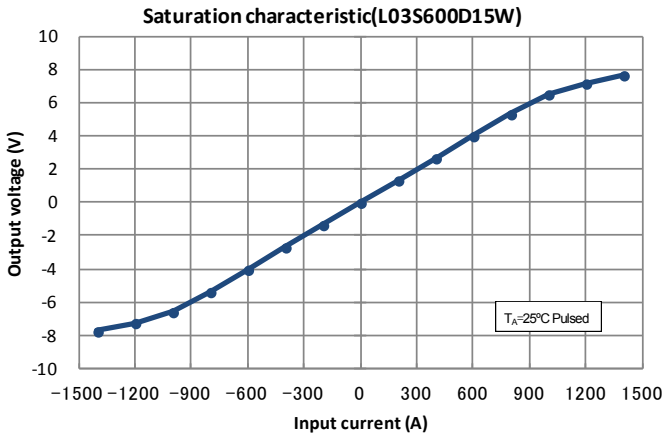
T_A=25ºC, V_{CC}=±15V, R_L=10kΩ

Parameters	Symbol	L03S050 D15WM	L03S100 D15WM	L03S200 D15WM	L03S300 D15WM	L03S400 D15WM	L03S500 D15WM	L03S600 D15WM	L03S700 D15WM	L03S800 D15WM
Primary nominal current	I_f	50AT	100AT	200AT	300AT	400AT	500AT	600AT	700AT	800AT
Saturation current	I_{fmax}	≥±150AT	≥±300AT	≥ ±600AT	≥ ±900AT	≥ ±1000A				
Rated output voltage	V_o	4V±0.040V (at If)								
Offset voltage[1] (at If=0A)	V_{of}	≤ ±40mV	≤ ±30mV							
Output linearity[2] (0A～If)	ε_L	≤±1% (at If)								
Power supply voltage	V_{CC}	±15V±5%								
Consumption current	Icc	≤20mA								
Response time[3]	t_r	≤10μs (at di/dt=100A/μs)								
Thermal drift of gain[4]	TcVo	≤ ±0.1%/ºC								
Thermal drift of offset	TcVof	≤±2mV/ºC	≤±1.0 mV/ºC							
Hysteresis error	V_{OH}	≤ ±20mV (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	-10ºC~+80ºC								
Ambient storage temperature	T_S	-25ºC~+85ºC								

[1] After removal of core hysteresis— [2] Without offset —[3] Time between 10% input current full scale and 90% of sensor output full scale — [4] Without Thermal drift of offset

Electrical Performances





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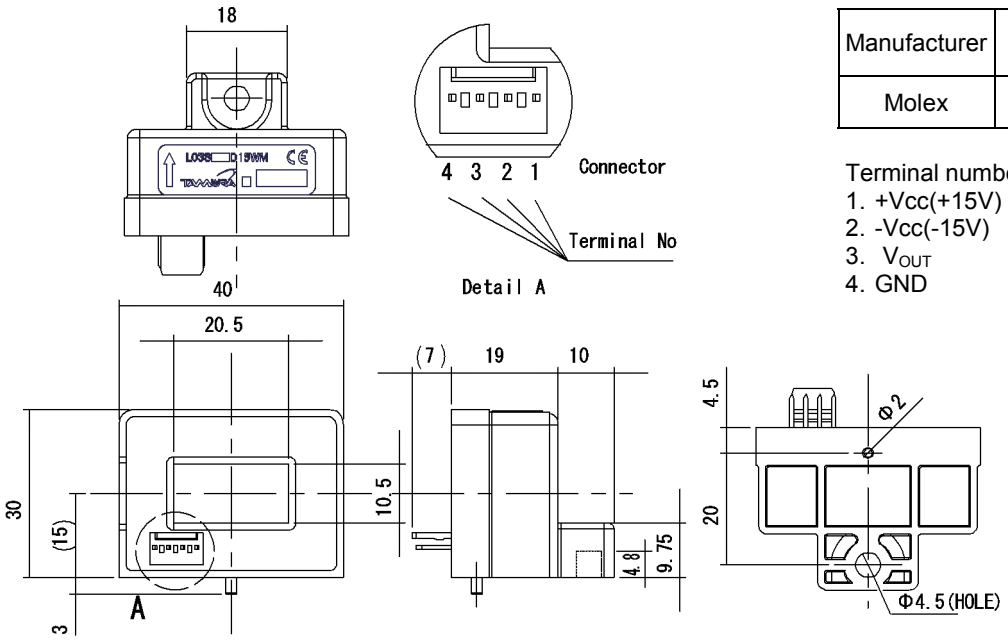
Mechanical dimensions

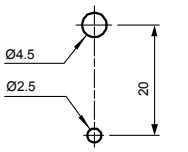


Connector

Manufacturer	Part Number	Old Part Number
Molex	22-04-1041	5045-04A

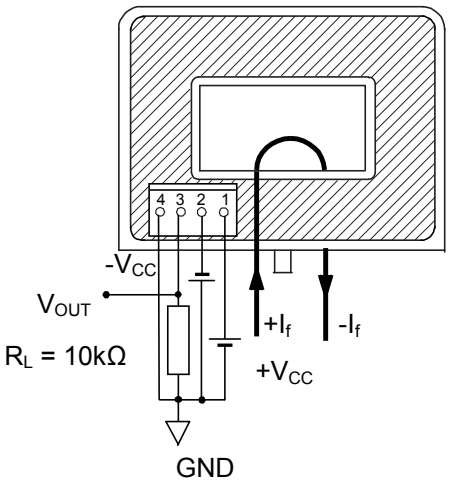
Terminal number:
1. +Vcc(+15V)
2. -Vcc(-15V)
3. V_{OUT}
4. GND

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



Recommended retainer holes

Electrical connection diagram



Package & Weight Information

Weight	Pcs/box	Pcs/carton	Pcs/pallet
51g	20	200	3600

Mouser Electronics

Authorized Distributor

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

Tamura:
L03S500D15WM L03S600D15WM L03S300D15WM L03S200D15WM L03S800D15WM L03S700D15WM L03S100D15WM L03S050D15WM L03S400D15WM