

Hall Effect Current Sensor L05Z800S15



Features:

- Open Loop type
- Panel mounting
- Unipolar power supply
- Industrial temperature range
- JST connector
- 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
- Regulated offset voltage

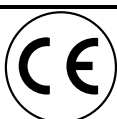
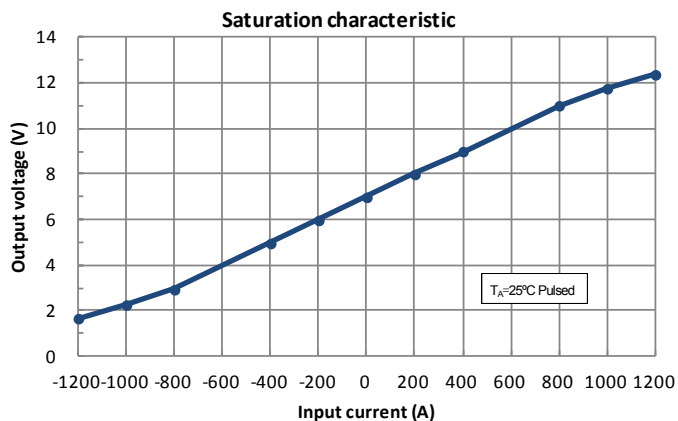
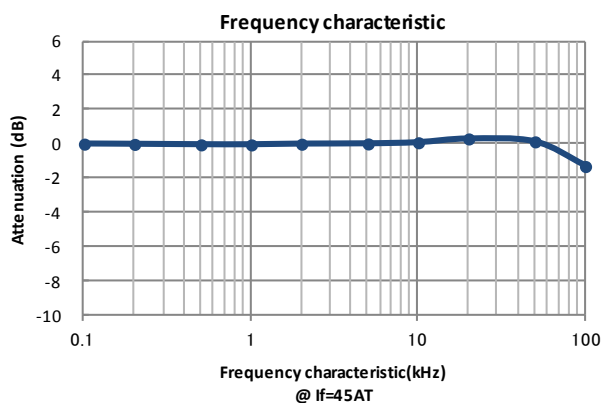
Specifications

 $T_A=25^{\circ}\text{C}$, $V_{CC}=+15\text{V}$, $R_L=10\text{k}\Omega$

Parameters	Symbol	L05Z800S15
Primary nominal current	I_f	800AT
Saturation current	I_{fmax}	$\geq \pm 900\text{AT}$
Rated output voltage	V_o	$11\text{V} \pm 0.11\text{V}$ (at I_f)
Offset voltage ¹	V_{of}	$+ 7.0\text{V} \pm 0.050\text{V}$ (at $I_f=0\text{A}$)
Output linearity ² (0A ~ I_f)	ϵ_L	$\leq \pm 1\%$ (at I_f)
Power supply voltage	V_{CC}	$+ 15\text{V} \pm 5\%$
Consumption current	I_{CC}	$\leq 20\text{mA}$
Response time ³	t_r	$\leq 10\mu\text{s}$ (at $di/dt = 100\text{A} / \mu\text{s}$)
Thermal drift of gain ⁴	$TcVo$	$\leq \pm 0.1\%/^{\circ}\text{C}$
Thermal drift of offset	$TcVof$	$\leq \pm 1.0\text{mV}/^{\circ}\text{C}$
Hysteresis allowance	V_{OH}	$\leq 20\text{mV}$ (at $I_f=0\text{A} \rightarrow I_f \rightarrow 0\text{A}$)
Insulation voltage	V_d	AC2500V, for 1minute (sensing current 0.5mA), inside of through hole \leftrightarrow terminal
Insulation resistance	R_{IS}	$\geq 500\text{M}\Omega$ (at DC500V), inside of through hole \leftrightarrow terminal
Ambient operation temperature	T_A	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Ambient storage temperature	T_s	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

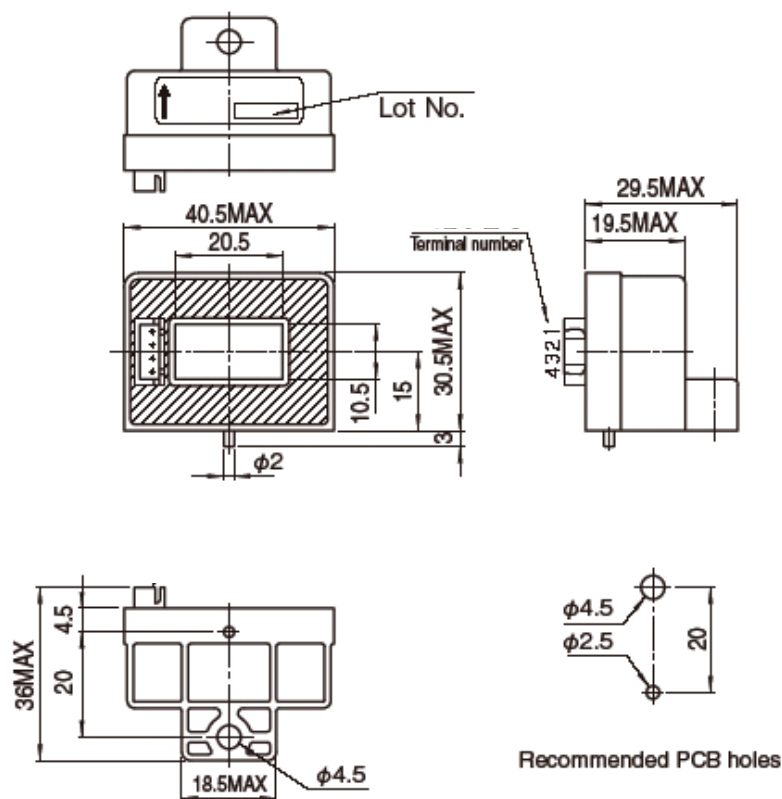
¹ V_{of} is fixed (independent of V_{CC}). After removal of core hysteresis—² Without offset —³ Time between 90% input current full scale and 90% of sensor output full scale—⁴ Without Thermal drift of offset

Electrical Performances



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Mechanical dimensions



NOTES

1. Unit is mm
2. Tolerance is 0.5mm

Connector

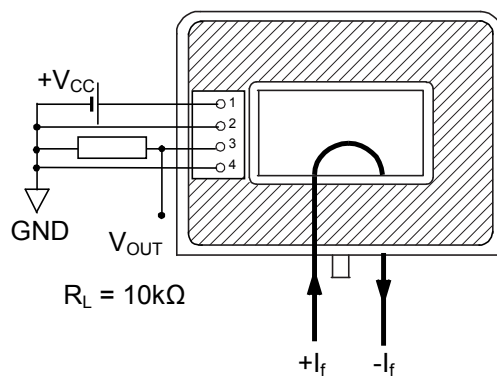
Manufacturer	Part Number
JST	B4B-XH-A-G

(Gold plated terminal)

Terminal number:

1. +V_{CC}(+15V)
2. GND
3. V_{OUT}
4. GND

Electrical connection diagram



Package & Weight Information

Weight	Pcs/box	Pcs/carton	Pcs/pallet
50g	20	200	3600

