

Hall Effect Current Sensors L05Z***S15 Series



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

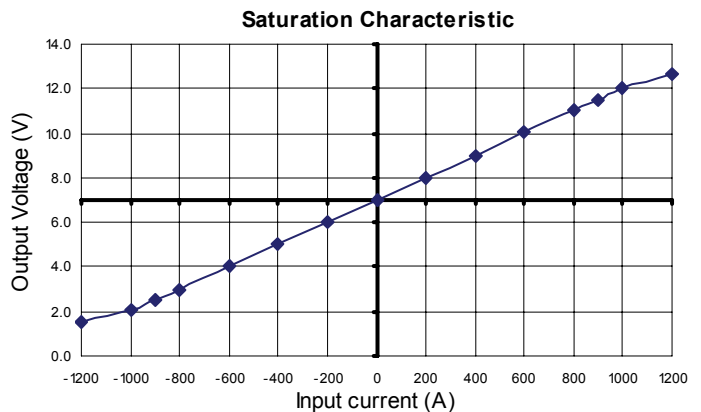
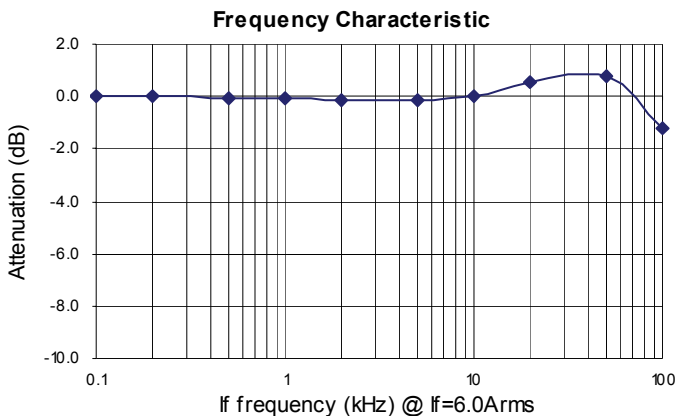
Specifications

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

Parameters	Symbol	L05Z800S15
Rated Current	I_f	800A
Saturation Current	I_{fmax}	$>\pm 900\text{A}$
Output Voltage	V_{OUT}	$V_{OE}+4\text{V} @ I_f$
Offset Voltage	V_{OE}	$+7.0\text{V}\pm 50\text{mV}$
Accuracy ¹	X	$\pm 1\% @ I_f$
Output Linearity ¹	ϵ_L	$\pm 1\% @ 0\text{A}\sim I_f$
Supply Voltage	V_{CC}	$+15\text{V}\pm 5\%$
Consumption Current	I_c	$\leq 20\text{mA}$
Response Time	t_r	$\leq 10\mu\text{s} (@ di/dt=I_f/\mu\text{s})$
Output Temperature Characteristic ¹	TCV_{OUT}	$\pm 0.1\%/^{\circ}\text{C}$
Offset Temperature Characteristic	TCV_{OE}	$\pm 1.0\text{mV}/^{\circ}\text{C} @ I_f=0\text{A}$
Hysteresis allowance	V_{OH}	$\leq 20\text{mV} (@ 0\text{A} \leftrightarrow I_f)$
Insulation Withstanding	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
Frequency Bandwidth ²	f	DC .. 50kHz
Operating Temperature	T_A	$-40^{\circ}\text{C}\sim +85^{\circ}\text{C}$
Storage Temperature	T_S	$-40^{\circ}\text{C}\sim +85^{\circ}\text{C}$

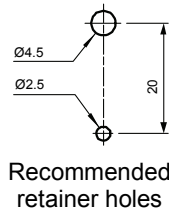
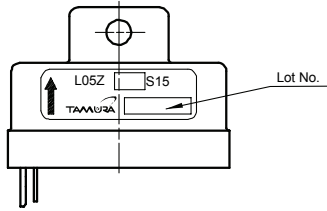
¹ Without offset — ² Small signal only to avoid excessive heating of magnetic core

Electrical Performances



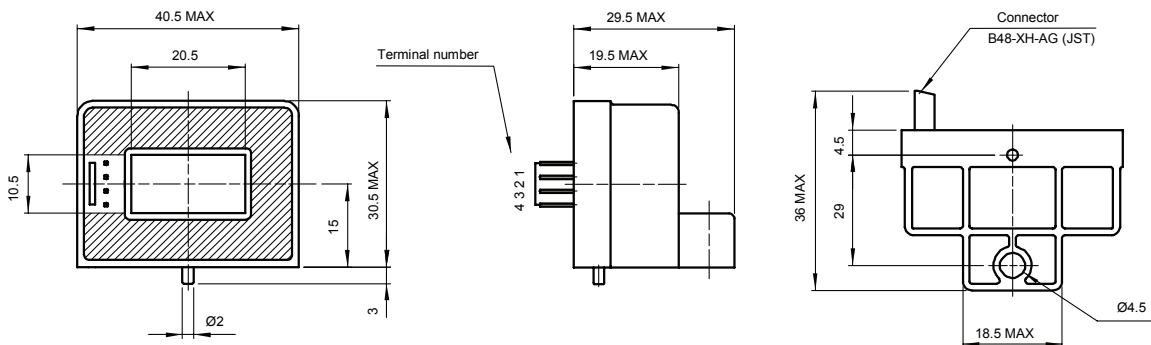
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Mechanical dimensions in mm

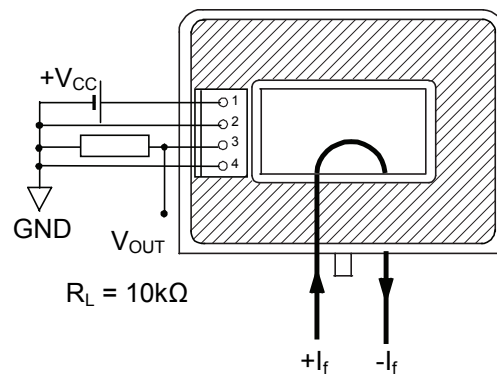


Note 1: Unless otherwise specified, tolerances shall be ± 0.5

Terminal number:
 1. +15V
 2. 0V
 3. OUT
 4. 0V



Electrical connection diagram



Package & Weight Information

Weight	Pcs/box	Pcs/carton	Pcs/pallet
51g	20	200	9600