

# 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

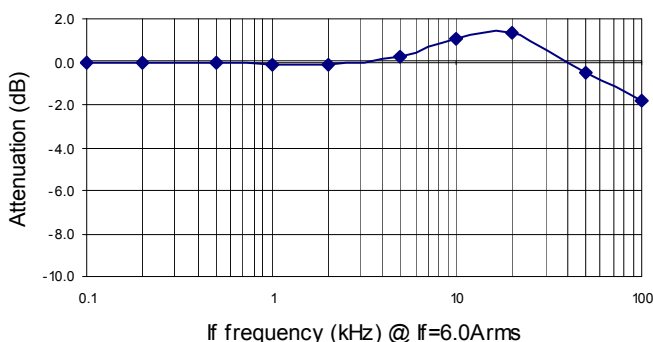
$T_A=25^{\circ}\text{C}$ ,  $V_{CC}=\pm 15\text{V}$ ,  $R_L=10\text{k}\Omega$

Parameters	Symbol	L03S050 D15WM	L03S100 D15WM	L03S200 D15WM	L03S300 D15WM	L03S400 D15WM	L03S500 D15WM	L03S600 D15WM	L03S700 D15WM	L03S800 D15WM	
Rated current	$I_f$	50AT	100AT	200AT	300AT	400AT	500AT	600AT	700AT	800AT	
Maximum Current	$I_{fmax}$	$\pm 150\text{AT}$	$\pm 300\text{AT}$	$\pm 600\text{AT}$	$\pm 900\text{AT}$	$\geq 1000\text{A}$					
Output Voltage	$V_{OUT}$	$4\text{V} \pm 40\text{mV} @ I_f$									
Offset Voltage	$V_{OE}$	$\leq \pm 40\text{mV} @ I_f = 0\text{A}$	$\leq \pm 30\text{mV} @ I_f = 0\text{A}$								
Accuracy <sup>1</sup>	$X$	$\pm 1\% @ I_f$									
Output Linearity <sup>1</sup>	$\epsilon_L$	$\leq \pm 1\% @ I_f$									
Power Supply	$V_{CC}$	$\pm 15\text{V} \pm 5\%$									
Consumption Current	$I_c$	$\leq 20\text{mA}$									
Response Time	$t_r$	$\leq 10\mu\text{s} (@ di/dt=200\text{A}/\mu\text{s})$									
Output Temperature Characteristic <sup>1</sup>	$TCV_{OUT}$	$\leq \pm 2\text{mV}/^{\circ}\text{C}$									
Offset Temperature Characteristic	$TCV_{OE}$	$\leq \pm 2\text{mV}/^{\circ}\text{C}$	$\leq \pm 1.0\text{mV}/^{\circ}\text{C}$								
Hysteresis error	$V_{OH}$	$\pm 30\text{mV} (@ 0\text{A} \Leftrightarrow I_f)$			$\pm 20\text{mV} (@ 0\text{A} \Leftrightarrow I_f)$			$\pm 10\text{mV} (@ 0\text{A} \Leftrightarrow I_f)$			
Withstand Voltage	$V_d$	$\text{AC}2500\text{V}$ for 1minute (sensing current 0.5mA), inside of through hole $\Leftrightarrow$ terminal									
Insulation Resistance	$R_{IS}$	$> 500\text{M}\Omega$ (500V DC), inside of through hole $\Leftrightarrow$ terminal									
Frequency Bandwidth <sup>2</sup>	$f$	$\text{DC} \dots 50\text{kHz}$									
Operating Temperature	$T_A$	$-10^{\circ}\text{C} \sim +80^{\circ}\text{C}$									
Storage Temperature	$T_s$	$-15^{\circ}\text{C} \sim +85^{\circ}\text{C}$									

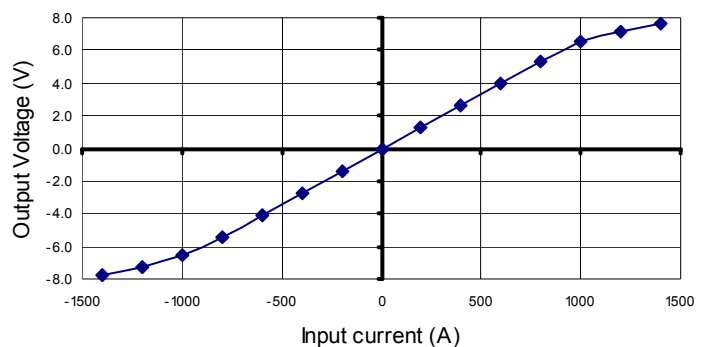
<sup>1</sup> Without offset — <sup>2</sup> Small signal only to avoid excessive heating of magnetic core

## Electrical Performances

Frequency Characteristic (L03S600D15W)

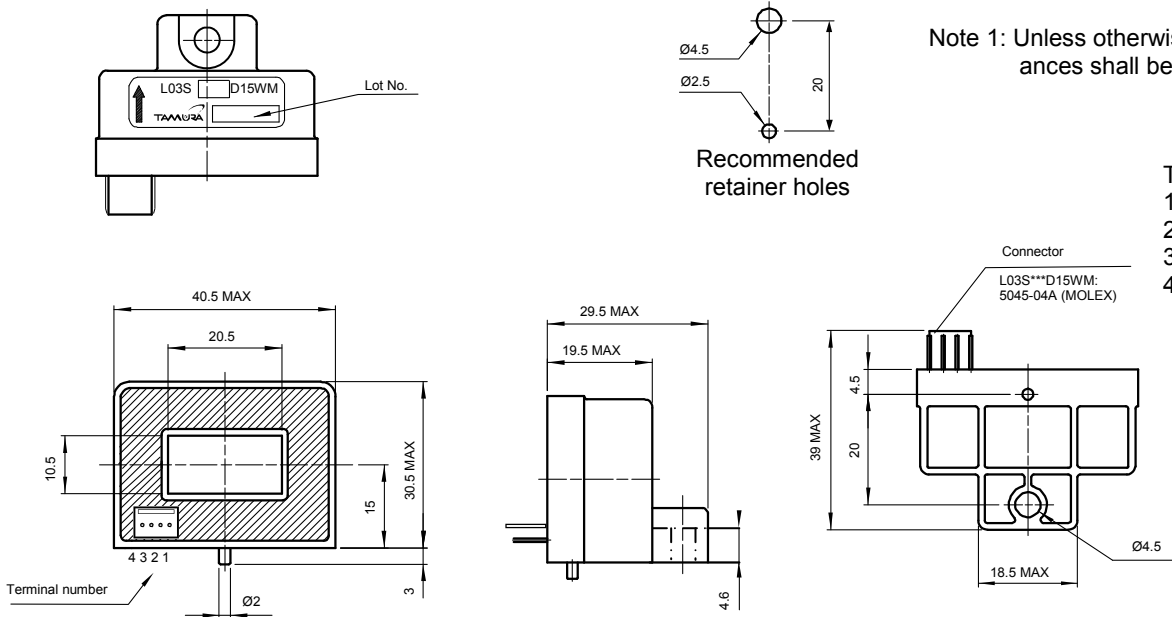


Saturation Characteristic (L03S600D15W)

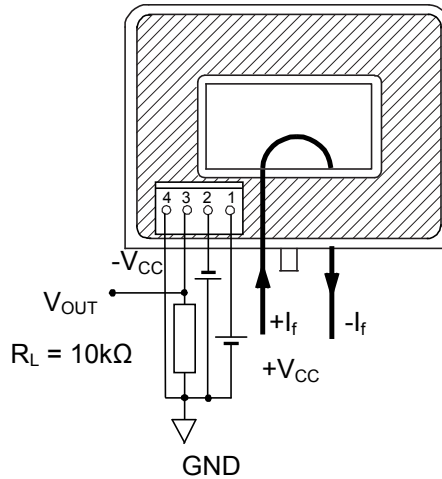


# Hall Effect Current Sensors L03S\*\*\*D15WM Series

## Mechanical dimensions in mm



## Electrical connection diagram



## Package & Weight Information

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