

## 3 to 25 Amp Applications — Open Loop

- Compact PCB Mount Design
- Dual Integrated Primary
- Withstanding Voltage of 2000 Vrms
- 3A - 25A with a Bipolar  $\pm 15\text{VDC}$  Supply Voltage
- Low Cost



Specifications Measured at 25°C, RL-10KΩ Vcc=±15V

Specification	L07P003D15	L07P005D15	L07P010D15	L07P015D15	L07P020D15	L07P025D15
Nominal Primary DC Current (If)	±3A	±5A	±10A	±15A	±20A	±25A
Maximum Current If(max)	±9A	±15A	±30A	±45A	±60A	±75A
Output Voltage @ If	V <sub>OUT</sub> +4V±0.05V, -4V±0.150V (at If)					
Offset Voltage	V <sub>OE</sub> 0± 0.50V					
Accuracy @ If <sup>1</sup>	X ± 1% of If					
Output Linearity <sup>1</sup> (O..If Max)	E <sub>L</sub> ≤ ± 1% (at 0A ~ If)					
Power Supply	V <sub>CC</sub> ± 15V ±5%					
Response Time	T <sub>r</sub> ≤ 10μsec (di/dt = 10A / 5μsec)					
Current Consumption	I <sub>c</sub> ≤ 30mA					
Output Temperature Characteristic	TCE <sub>G</sub> <± 0.1% / °C					
Offset Temperature Characteristic	V <sub>OT</sub> ≤ ± 2mV / °C TYP					
Hysteresis Allowance @ If=0	V <sub>OH</sub> ≤ 30mV (0A = If)					
Withstand Voltage (50/60Hz)	V <sub>d</sub> 2,000VACrms for 1 minute (Sensing Current 0.5mA)					
Insulation Resistance @ 500VDC	R <sub>IS</sub> ≥ 500MW					
Operating Temperature	T <sub>A</sub> -10 ~ +80°C					
Storage Temperature	T <sub>S</sub> -20 ~ +85°C					

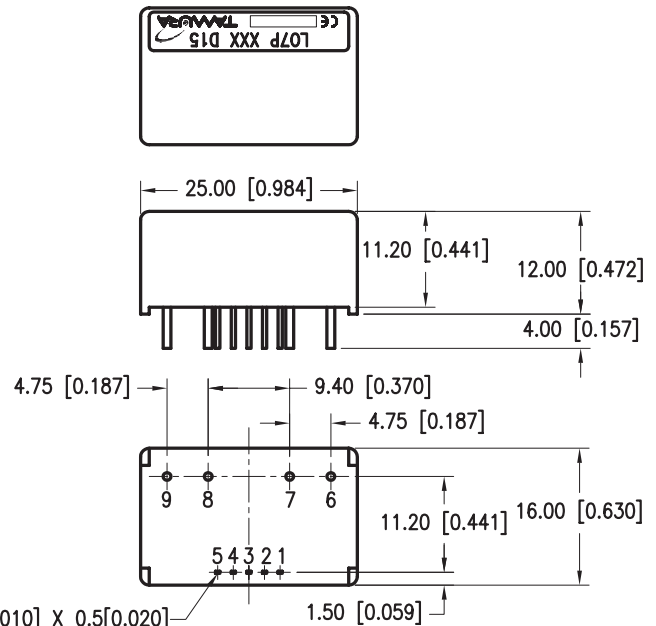
1. Without offset

### Package & Weight Information

QTY/Box	Weight/each(g)
CALL	CALL

TERMINAL	FUNCTION
1	+15V
2	-15V
3	OUT1
4	OUT2
5	GND
6	+IN1
7	-IN1
8	+IN2
9	-IN2

CURRENT	∅ PIN
3A	∅ 0.6[0.024]
5A	∅ 0.8[0.031]
10A ~ 15A	∅ 1.4[0.055]
20A ~ 25A	∅ 1.6[0.063]



Unless otherwise specified, tolerances shall be ±0.5mm.

### TAMURA CORPORATION

43352 Business Park Drive. | P.O. Box 892230 Temecula, CA 92589-2230 | www.tamuracorp.com

USA  
Tel: 800-472-6624  
Fax: 951-676-9482

Japan  
Tel: 81 (0)3 3978-2111  
Fax: 81 (0)3 3923-0230

United Kingdom  
Tel: 44 (0) 1380 731 700  
Fax: 44 (0) 1380 731 702

Hong Kong  
Tel: 852-2389-4321  
Fax: 852-2341-9689

## 5 to 40 Amp Applications — Open Loop

- Compact PCB Mount Design
- Dual Integrated Primary
- Withstanding Voltage of 2000 Vrms
- 5A - 40A Unipolar +5VDC Supply Voltage
- Low Cost



Specifications Measured at 25°C, RL=10KΩ Vcc=+5V

Specification	L07P005S05	L07P007S05	L07P010S05	L07P015S05	L07P020S05	L07P025S05	L07P030S05	L07P040S05
Nominal Primary DC Current (If)	+5A	+7A	+10A	+15A	+20A	+25A	+30A	+40V
Maximum Current If(max)	+6.25A	+9.375A	+12.5A	+18.75A	+25A	+31.25A	+37.5A	+50A
Output Voltage @ If	2.5V ±1.5V							
Offset Voltage V <sub>OE</sub>	V <sub>OUT</sub> ± 45mV							
Accuracy @ If <sup>1</sup>	± 1%							
Output Linearity <sup>1</sup> (O.If Max)	≤ ± 1% (at 0A ~ If)							
Power Supply Vcc	+ 15V ±5%							
Response Time T <sub>r</sub>	≤ 5μsec (di/dt = 10A / 5μsec)							
Current Consumption I <sub>c</sub>	≤ 30mA							
Output Temperature Characteristic TCE <sub>G</sub>	< ± 2mV / °C							
Offset Temperature Characteristic V <sub>OT</sub>	≤ ± 2mV / °C MAX							
Hysteresis Allowance @ If=0 V <sub>OH</sub>	≤ 15mV (0A = If)							
Withstand Voltage (50/60Hz) V <sub>d</sub>	2,000VACrms for 1 minute (Sensing Current 0.5mA)							
Insulation Resistance @ 500VDC R <sub>IS</sub>	≥ 500MΩ							
Operating Temperature T <sub>A</sub>	-25 ~ +80°C							
Storage Temperature T <sub>S</sub>	-25 ~ +85°C							

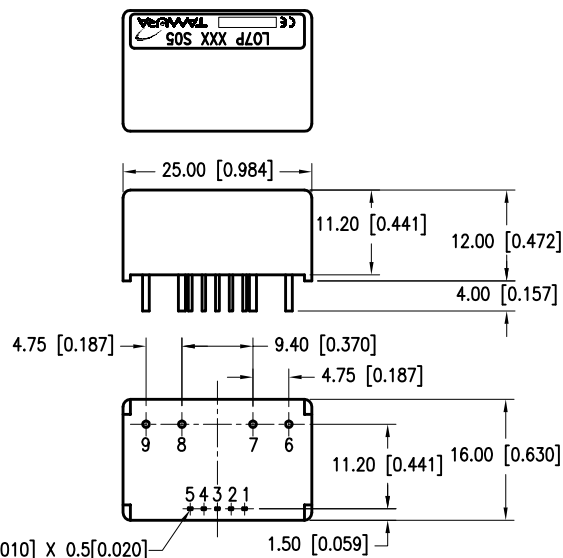
1. Without offset

### Package & Weight Information

QTY/Box	Weight/each(g)
CALL	CALL

TERMINAL	FUNCTION
1	+5V
2	NC
3	OUT1
4	OUT2
5	GND
6	+IN1
7	-IN1
8	+IN2
9	-IN2

CURRENT	Ø PIN
5A ~ 10A	Ø 0.6[0.024]
15A ~ 20A	Ø 0.9[0.035]
25A ~ 40A	Ø 1.2[0.047]



Unless otherwise specified, tolerances shall be ±0.5mm.

### TAMURA CORPORATION

43352 Business Park Drive. | P.O. Box 892230 Temecula, CA 92589-2230 | www.tamuracorp.com

USA  
Tel: 800-472-6624  
Fax: 951-676-9482

Japan  
Tel: 81 (0)3 3978-2111  
Fax: 81 (0)3 3923-0230

United Kingdom  
Tel: 44 (0) 1380 731 700  
Fax: 44 (0) 1380 731 702

Hong Kong  
Tel: 852-2389-4321  
Fax: 852-2341-9689



## 3 to 30 Amp Applications — Open Loop

- Compact PCB Mount Design
- Integrated Primary
- Withstanding Voltage of 3000 Vrms
- 3A - 30A with a Bipolar  $\pm 15$ VDC Supply Voltage
- Low Cost

Specifications Measured at 25°C, RL-10K $\Omega$  Vcc= $\pm 15$ V

Specification	L18P003D15	L18P005D15	L18P010D15	L18P015D15	L18P020D15	L18P025D15	L18P030D15
Nominal Primary DC Current (If)	$\pm 3$ A	$\pm 5$ A	$\pm 10$ A	$\pm 15$ A	$\pm 20$ A	$\pm 25$ A	$\pm 30$ A
Maximum Current If(max)	$\pm 9$ A	$\pm 15$ A	$\pm 30$ A	$\pm 45$ A	$\pm 60$ A	$\pm 60$ A	$\pm 90$ A
Output Voltage @ If	V <sub>OUT</sub> $\pm 4V \pm 0.04V$ (at If)						
Offset Voltage V <sub>OE</sub>	0 $\pm 0.040V$						
Accuracy @ If <sup>1</sup>	X $\pm 1\%$ of If						
Output Linearity <sup>1</sup> (O..If Max)	E <sub>L</sub> $\leq \pm 1\%$ MAX						
Power Supply V <sub>cc</sub>	$\pm 15V \pm 5\%$						
Response Time T <sub>r</sub>	$\leq 5\mu\text{sec}$ (di/dt = 10A / 5 $\mu\text{sec}$ )						
Current Consumption I <sub>c</sub>	$\leq 15\text{mA}$						
Output Temperature Characteristic TCE <sub>G</sub>	$< \pm 0.1\%$ / °C MAX						
Offset Temperature Characteristic V <sub>OT</sub>	$\leq \pm 1.5\text{mV}$ / °C TYP						
Hysteresis Allowance @ If=0 V <sub>OH</sub>	$\leq 25\text{mV}$ (0A = If)						
Withstand Voltage (50/60Hz) V <sub>d</sub>	3,000VACrms for 1 minute (Sensing Current 0.5mA)						
Insulation Resistance @ 500VDC R <sub>IS</sub>	$\geq 500\text{M}\Omega$						
Operating Temperature T <sub>A</sub>	-10 ~ +80°C						
Storage Temperature T <sub>S</sub>	-20 ~ +85°C						

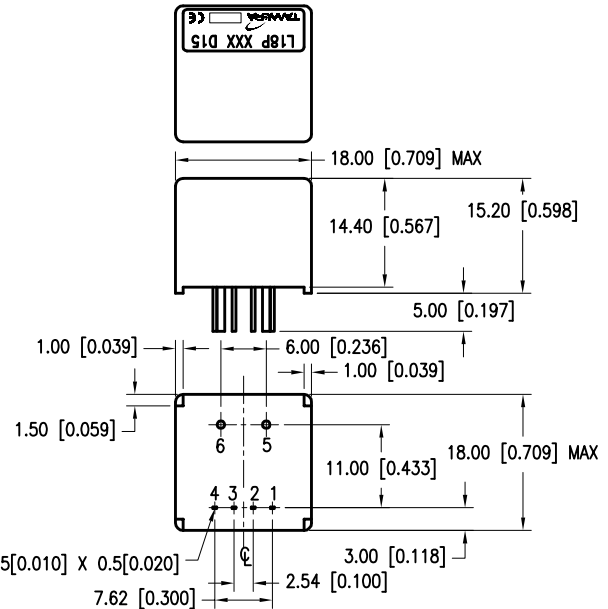
<sup>1</sup> Without offset

## Package & Weight Information

QTY/Box	Weight/each(g)
CALL	CALL

TERMINAL	FUNCTION
1	-V <sub>CC</sub>
2	GND
3	+V <sub>CC</sub>
4	OUTPUT
5	+IN
6	-IN

CURRENT	Ø PIN
3A ~ 5A	Ø 0.6[0.024]
10A ~ 15A	Ø 0.9[0.035]
20A ~ 30A	Ø 1.2[0.047]



4 RECTANGULAR PINS 0.25[0.010] X 0.5[0.020] X 0.5[0.020] X 0.5[0.020]  
7.62 [0.300] 2.54 [0.100] 3.00 [0.118]

Unless otherwise specified, tolerances shall be  $\pm 0.5\text{mm}$ .

## TAMURA CORPORATION

43352 Business Park Drive. | P.O. Box 892230 Temecula, CA 92589-2230 | www.tamuracorp.com

USA  
Tel: 800-472-6624  
Fax: 951-676-9482

Japan  
Tel: 81 (0)3 3978-2111  
Fax: 81 (0)3 3923-0230

United Kingdom  
Tel: 44 (0) 1380 731 700  
Fax: 44 (0) 1380 731 702

Hong Kong  
Tel: 852-2389-4321  
Fax: 852-2341-9689

# Hall Effect Current Sensors

## 40 to 60 Amp Applications — Open Loop

- Compact PCB Mount Design
- Dual Integrated Primary
- Withstanding Voltage of 3000 Vrms
- 40A - 60A Bipolar  $\pm 15\text{VDC}$  Supply Voltage
- Durable Busbar Construction



Specifications Measured at 25°C, RL-10KΩ Vcc=±15V

Specification	L18P040D15	L18P050D15	L18P060D15
Nominal Primary DC Current (If)	+40A	+50A	+60A
Maximum Current If(max)	±120A	±150A	±180A
Output Voltage @ If	V <sub>OUT</sub>	±4.0V ±0.050V	
Offset Voltage	V <sub>OE</sub>	0± 0.040V	
Accuracy @ If <sup>1</sup>	X	± 1%	
Output Linearity <sup>1</sup> (O..If Max)	E <sub>L</sub>	≤ 1% MAX	
Power Supply	V <sub>CC</sub>	± 15V ±5%	
Response Time	T <sub>r</sub>	≤ 5μsec	
Current Consumption	I <sub>c</sub>	≤ 15mA	
Output Temperature Characteristic	TCE <sub>G</sub>	< ± 0.1% / °C MAX	
Offset Temperature Characteristic	V <sub>OT</sub>	≤ ± 1.5mV / °C MAX	
Hysteresis Allowance @ If=0	V <sub>OH</sub>	≤ 40mV (0A = If)	
Withstand Voltage (50/60Hz)	V <sub>d</sub>	3000VACrms for 1 minute (Sensing Current 0.5mA)	
Insulation Resistance @ 500VDC	R <sub>IS</sub>	≥ 500MΩ	
Operating Temperature	T <sub>A</sub>	-10 ~ +80°C	
Storage Temperature	T <sub>S</sub>	-20 ~ +85°C	

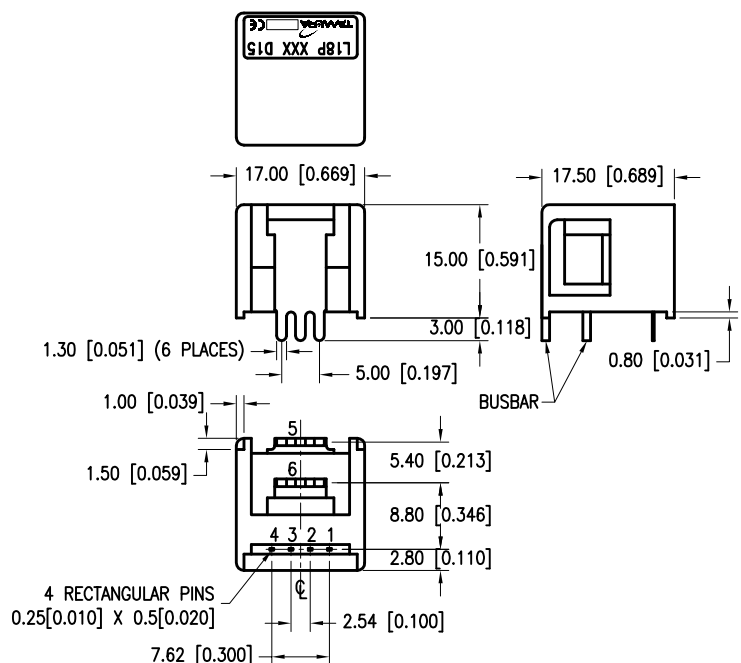
1. Without offset

### Package & Weight Information

QTY/Box	Weight/each(g)
CALL	CALL

TERMINAL	FUNCTION
1	-V <sub>CC</sub>
2	GND
3	+V <sub>CC</sub>
4	OUTPUT
5	+IN
6	-IN

CURRENT	Ø PIN
40A ~ 60A	BUSBAR 1.0[0.04]X6.3[2.48]



Unless otherwise specified, tolerances shall be ±0.5mm.

### TAMURA CORPORATION

43352 Business Park Drive. | P.O. Box 892230 Temecula, CA 92589-2230 | www.tamuracorp.com

USA  
Tel: 800-472-6624  
Fax: 951-676-9482

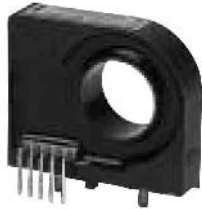
Japan  
Tel: 81 (0)3 3978-2111  
Fax: 81 (0)3 3923-0230

United Kingdom  
Tel: 44 (0) 1380 731 700  
Fax: 44 (0) 1380 731 702

Hong Kong  
Tel: 852-2389-4321  
Fax: 852-2341-9689

# Hall Effect Current Sensors

## 50 to 200 Amp Applications — Open Loop



- Compact PCB Mount Design
- Voltage Output type
- CE EN50178 (pending)

Specifications Measured at 25°C, RL=10KΩ, Vcc=±15V

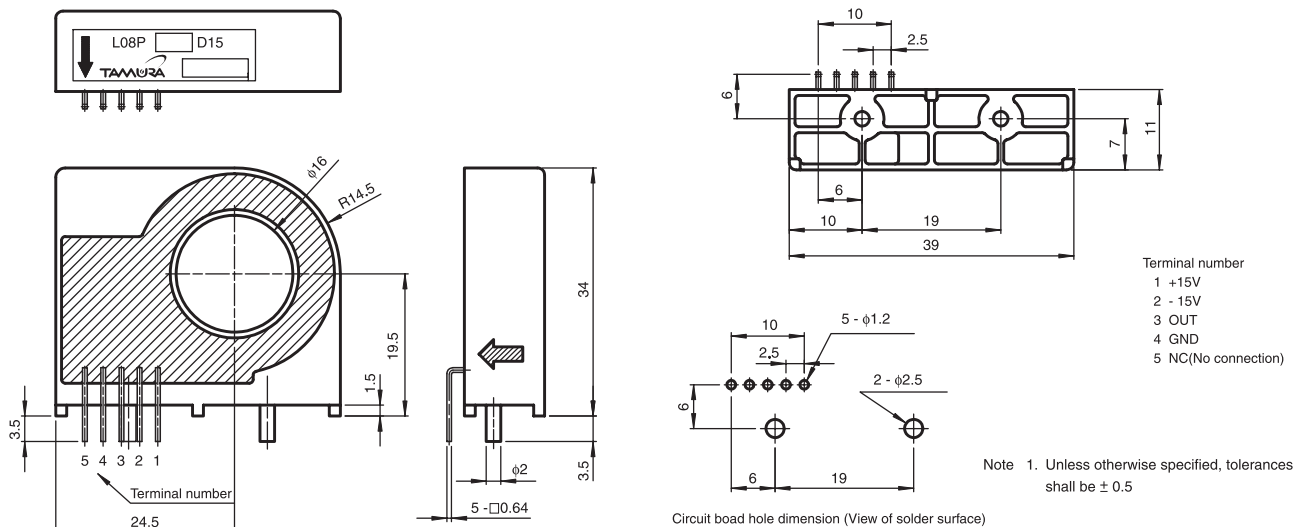
Specification		L08P050D15	L08P100D15	L08P150D15	L08P200D15
Nominal Primary DC Current	(If)	50AT	100AT	150AT	200AT
Maximum Current	If(max)	±150AT	±300AT	±350AT	±350AT
Output Voltage @ If	V <sub>OUT</sub>	4V			
Offset Voltage	V <sub>OE</sub>	<±40mV			
Accuracy @ If <sup>2</sup>	X	±1% of If			
Output Linearity <sup>2</sup> (0..If MAX)	E <sub>L</sub>	≤±1% of If			
Power Supply	V <sub>CC</sub>	±15V±5%			
Response Time	t <sub>r</sub>	<10μ Sec			
Current Consumption	I <sub>c</sub>	12mA typ			
Output Temperature Characteristic	TCE <sub>B</sub>	<±0.1% / °C	<±0.05% / °C		
Offset Temperature Characteristic	V <sub>OT</sub>	<±2mV / °C	<±1mV / °C		
Hysteresis Allowance @ If=0	V <sub>OH</sub>	< ±30mV	<± 20mV		
Withstand Voltage (50/60Hz)	V <sub>d</sub>	2,500VACrms for 1 minute (Sensing Current 0.5mA)			
Insulation Resistance @ 500VDC	R <sub>IS</sub>	≥500MΩ			
Operating Bandwidth (-3dB)	f	DC - 50kHz			
Operating Temperature	T <sub>A</sub>	-10 - +80°C			
Storage Temperature	T <sub>s</sub>	-20 - +85°C			

<sup>1</sup> Small signal only; derating needed to avoid excessive core heating at high frequency

<sup>2</sup> Without offset

### Package & Weight Information

QTY/Box	Weight/each(g)
50	25



### TAMURA CORPORATION

43352 Business Park Drive. | P.O. Box 892230 Temecula, CA 92589-2230 | www.tamuracorp.com

USA

Tel: 800-872-6624  
Fax: 909-676-9482

Japan

Tel: 81 (0)3 3978-2111  
Fax: 81 (0)3 3923-0230

United Kingdom

Tel: 44 (0) 1380 731 700  
Fax: 44 (0) 1380 731 702

Hong Kong

Tel: 852-2389-4321  
Fax: 852-2341-9689

# Hall Effect Current Sensors

## 50 to 600 Amp Applications — Open Loop

- Compact PCB Mount Design
- Voltage Output type
- Very High Linearity
- 15V Supply Voltage
- CE EN50178 (pending)



Specifications Measured at 25°C, RL=10KΩ, Vcc=±15V

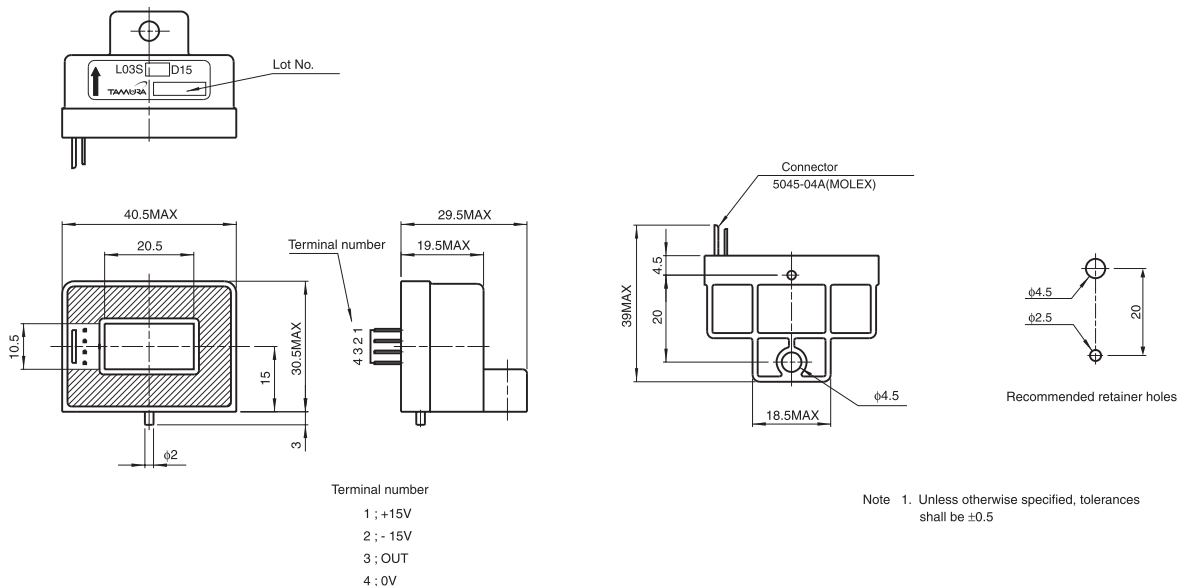
Specification	L03S050D15	L03S100D15	L03S200D15	L03S300D15	L03S400D15	L03S500D15	L03S600D15
Nominal Primary DC Current (If)	50AT	100AT	200AT	300AT	400AT	500AT	600AT
Maximum Current If(max)	±150AT	±300AT	±600AT	±700AT	±700AT	±700AT	±700AT
Output Voltage @ If	V <sub>OUT</sub> 4V						
Offset Voltage V <sub>OE</sub>	<± 40mV			<±30mV			
Accuracy @ If <sup>2</sup>	X			±1% of If			
Output Linearity <sup>2</sup> (0..If MAX)	E <sub>L</sub>			±1% of If			
Power Supply V <sub>CC</sub>	±15V±5%						
Response Time t <sub>r</sub>	≤5μ Sec						
Current Consumption I <sub>c</sub>	12mA typ						
Output Temperature Characteristic TCE <sub>G</sub>	<±0.1% / °C						
Offset Temperature Characteristic V <sub>OT</sub>	<±2mV / °C			<±1mV / °C			
Hysteresis Allowance @ If=0 V <sub>OH</sub>	±30mV			±20mV		±10mV	
Withstand Voltage (50/60Hz) V <sub>d</sub>	2,500VACrms for 1 minute (sensing current 0.5mA)						
Insulation Resistance @ 500VDC R <sub>IS</sub>	≥500MΩ						
Operating Bandwidth <sup>1</sup> (-3dB) f	DC - 50kHz						
Operating Temperature T <sub>A</sub>	-10 - +80°C						
Storage Temperature T <sub>S</sub>	-15 - +90°C						

<sup>1</sup> Small signal only; derating needed to avoid excessive core heating at high frequency

<sup>2</sup> Without offset

### Package & Weight Information

QTY/Box	Weight/each(g)
20	50



### TAMURA CORPORATION

43352 Business Park Drive. | P.O. Box 892230 Temecula, CA 92589-2230 | www.tamuracorp.com  
 USA | Japan | United Kingdom | Hong Kong  
 Tel: 800-872-6624 | Tel: 81 (0)3 3978-2111 | Tel: 44 (0) 1380 731 700 | Tel: 852-2389-4321  
 Fax: 909-676-9482 | Fax: 81 (0)3 3923-0230 | Fax: 44 (0) 1380 731 702 | Fax: 852-2341-9689

# Hall Effect Current Sensors

## 50 to 600 Amp Applications — Open Loop



- Compact PCB Mount Design
- Voltage Output type
- Very High Linearity
- 5V Supply Voltage
- CE EN50178 (pending)

Specifications Measured at 25°C, RL=10KΩ, Vcc=+ 5V; Vref =  $\frac{V_{CC}}{2}$

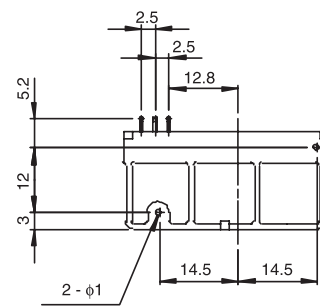
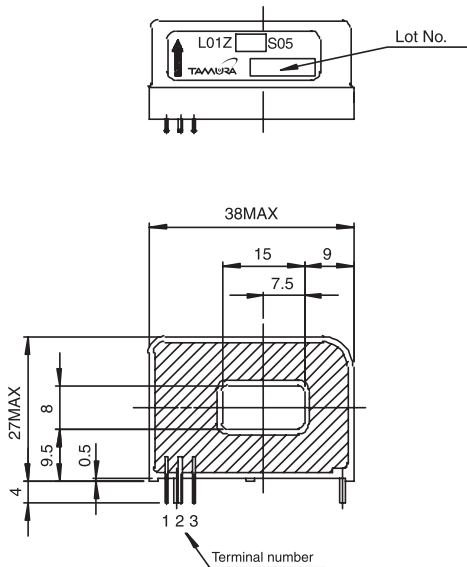
Specification	L01Z050S05	L01Z100S05	L01Z150S05	L01Z200S05	L01Z300S05	L01Z400S05	L01Z500S05	L01Z600S05
Nominal Primary DC Current (If)	50AT	100AT	150AT	200AT	300AT	400AT	500AT	600AT
Maximum Current If(max)	±62.5AT	±125AT	±187.5AT	±250AT	±375AT	±500AT	±625AT	±750AT
Output Voltage @ If	Vref±1.5V				Vref±1.5V			
Offset Voltage V <sub>OE</sub>	2.5V±0.035V				2.5V±0.030V			
Accuracy @ If <sup>2</sup>	X	<±1% of If			<±1% of If			
Output Linearity <sup>2</sup> (0..If MAX)	E <sub>L</sub>			±1% of If				
Power Supply Vcc				5V ±2.0%				
Response Time t <sub>r</sub>				<5μs				
Current Consumption I <sub>c</sub>				<15mA				
Output Temperature Characteristic TCE <sub>g</sub>	<±2mV / °C			<±1.5mV / °C				
Offset Temperature Characteristic V <sub>OT</sub>	<±2mV / °C			<±1mV / °C				
Hysteresis Allowance @ If=0 V <sub>OH</sub>		±8mV		±4mV			±6mV	
Withstand Voltage (50/60Hz) V <sub>d</sub>				2,500VACrms for 1 minute (sensing current 0.5mA)				
Insulation Resistance @ 500VDC R <sub>IS</sub>				≥500MΩ				
Operating Bandwidth <sup>1</sup> (-3dB) f				DC - 50kHz				
Operating Temperature T <sub>A</sub>				-10 - +80°C				
Storage Temperature T <sub>S</sub>				-15 - +85°C				

<sup>1</sup> Small signal only; derating needed to avoid excessive core heating at high frequency

<sup>2</sup> Without offset

### Package & Weight Information

QTY/Box	Weight/each(g)
50	45



Terminal number  
1 OUT  
2 OV  
3 5V

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

## TAMURA CORPORATION

43352 Business Park Drive. | P.O. Box 892230 Temecula, CA 92589-2230 | www.tamuracorp.com

USA

Tel: 800-872-6624  
Fax: 909-676-9482

Japan

Tel: 81 (0)3 3978-2111  
Fax: 81 (0)3 3923-0230

United Kingdom

Tel: 44 (0) 1380 731 700  
Fax: 44 (0) 1380 731 702

Hong Kong

Tel: 852-2389-4321  
Fax: 852-2341-9689

# Hall Effect Current Sensors

## 100 to 300 Amp Applications — Closed Loop

- PCB Mount Design
- Current Output type
- Very High Linearity
- $\pm 15V$  Supply Voltage
- CE EN50178 (pending)



Specifications Measured at 25°C, RL=10K $\Omega$ , VCC= $\pm 15V$

Specification		S21Z100D15	S21Z150D15	S21Z200D15	S21Z300D15
Nominal Primary DC Current	(If)	100A	150A	200A	300A
Maximum Current	If(max)	150A	225A	300A	450A
Output Current @ If	I <sub>OUT</sub>	50mA	75mA	100mA	150mA
Conversion Ratio	K <sub>n</sub>	1:2000	1:2000	1:2000	1:2000
Accuracy	X	$\pm 1\%$ of If			
Offset Current (If=0) <sup>1</sup>	I <sub>o</sub>	$\pm 0.5mA$			
Output Linearity <sup>1</sup> (0..If)	E <sub>L</sub>	$\pm 0.25\%$ of If			
Power Supply	V <sub>CC</sub>	$\pm 15V \pm 5\%$ <sup>2</sup>			
Response Time	t <sub>r</sub>	$\leq 1\mu s$			
Current Consumption	I <sub>c</sub>	$\pm 16mA$ <sup>3</sup>			
Output Temperature Characteristic	TC <sub>OUT</sub>	$\pm 0.025\% / ^\circ C$ @ If=0 (Ta=-5 to +70°C)			
Offset Temperature Characteristic	I <sub>OT</sub>	$\pm 0.025mA / ^\circ C$ @ If=0 (Ta=-5 to +70°C)			
Hysteresis Allowance If=0 - Ifmax)	I <sub>OH</sub>	$\leq 0.3mA$			
Withstand Voltage (50/60Hz)	V <sub>d</sub>	2,500VACrms for 1 minute (sensing current 0.5mA)			
Insulation Resistance @ 500VDC	R <sub>IS</sub>	500M $\Omega$			
Frequency Bandwidth (-3dB)	f	DC - 150kHz			
Operating Temperature	T <sub>A</sub>	-10 - +70°C			
Storage Temperature	T <sub>S</sub>	-20 - +85°C			
Secondary Coil Resistance	R <sub>s</sub>	TBD Ohms @ Ta = 70°C (Contact Tamura for additional info)			

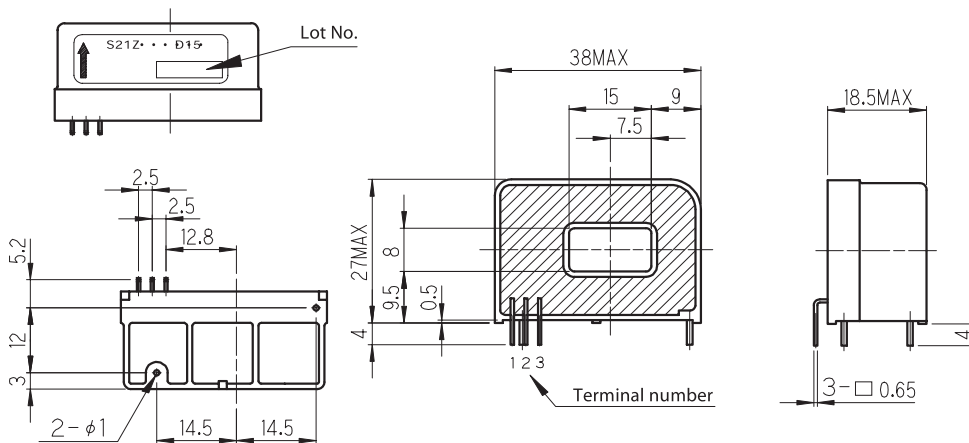
<sup>1</sup> Without Offset

<sup>2</sup> Ifmax is Restricted by V<sub>CC</sub>

<sup>3</sup> Output Current not included

### Package & Weight Information

QTY/Box	Weight/each(g)
50	25



Note 1. Unless otherwise specified, tolerances shall be  $\pm 0.5$

Terminal number  
1.OUT  
2.-15V  
3.+15V

### TAMURA CORPORATION

43352 Business Park Drive. | P.O. Box 892230 Temecula, CA 92589-2230 | www.tamuracorp.com  
 USA | Japan | United Kingdom | Hong Kong  
 Tel: 800-872-6624 | Tel: 81 (0)3 3978-2111 | Tel: 44 (0) 1380 731 700 | Tel: 852-2389-4321  
 Fax: 909-676-9482 | Fax: 81 (0)3 3923-0230 | Fax: 44 (0) 1380 731 702 | Fax: 852-2341-9689



# Hall Effect Current Sensors

## 50 to 300 Amp Applications — Closed Loop



- Panel Mount Design
- Current Output type
- Very High Linearity
- $\pm 12V$  or  $\pm 15V$  Supply Voltage
- CE EN50178 (pending)

Specifications Measured at 25°C,  $R_L \pm 15K\Omega$ ,  $V_{CC} = \pm 12V$

Specification		S20S050A	S20S100A	S20S150A	S20S200A	S20S300A
Nominal Primary DC Current	(If)	50A	100A	150A	200A	300A
Maximum Current	$I_{F(max)}$	75A	150A	225A	300A	450A
Output Current @ If	$I_{OUT}$	50mA	100mA	150mA	100mA	150mA
Conversion Ratio	$K_H$	1:1000	1:1000	1:1000	1:2000	1:2000
Offset Current (If=0)	$I_o$			$\pm 0.5mA$		
Accuracy <sup>4</sup>	X			$< \pm 1\%$ of If		
Output Linearity <sup>4</sup> (0..MAX)	$E_L$			$\pm 0.25\%$		
Power Supply	$V_{CC}$			$12V$ or $\pm 15V \pm 5\%$ <sup>2</sup>		
Response Time @ $di/dt=50A/uSec$	$t_r$			$1\mu s$		
Current Consumption	$I_c$			$\pm 16mA$ <sup>3</sup>		
Output Temperature Characteristic	$TCI_{OUT}$			$\pm 0.02\% / ^\circ C$ @ If (Ta=-5 to +70°C)		
Offset Temperature Characteristic	$I_{OT}$			$\pm 0.025mA / ^\circ C$ @ If=0 (Ta=-5 to +70°C)		
Hysteresis Allowance	$I_{OH}$			0.5mA		
Withstand Voltage (50/60Hz)	$V_d$			2,500VACrms for 1 minute (sensing current 0.5mA)		
Insulation Resistance @ 500VDC	$R_{IS}$			500M $\Omega$		
Frequency Bandwidth (-3dB)	f			DC - 150kHz		
Operating Temperature	$T_A$			-10 - +70°C		
Storage Temperature	$T_S$			-20 - +85°C		
Secondary Coil Resistance	$R_S$			<sup>1</sup> Ohms @ 70°C (Contact Tamura Tech Support)		

<sup>1</sup> TBD

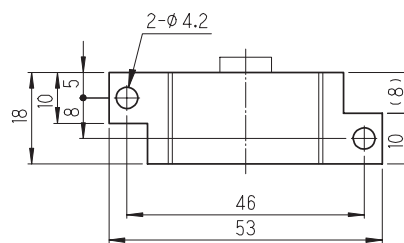
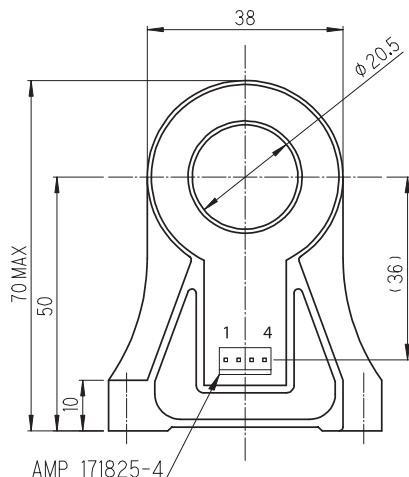
<sup>2</sup> Ifmax is Restricted by Vcc

<sup>3</sup> Output Current not included

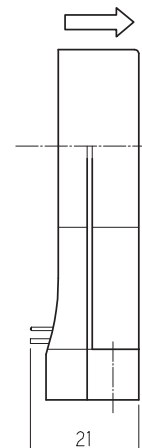
<sup>4</sup> Without offset

### Package & Weight Information

QTY/Box	Weight/each(g)
TBD	46



Note Unless otherwise specified, tolerances shall be  $\pm 0.5$



Terminal Pin  
1+15V  
2- 15V  
3.OUT  
4.NC

### TAMURA CORPORATION

43352 Business Park Drive. | P.O. Box 892230 Temecula, CA 92589-2230 | www.tamuracorp.com

USA  
Tel: 800-872-6624  
Fax: 909-676-9482

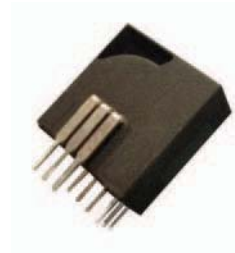
Japan  
Tel: 81 (0)3 3978-2111  
Fax: 81 (0)3 3923-0230

United Kingdom  
Tel: 44 (0) 1380 731 700  
Fax: 44 (0) 1380 731 702

Hong Kong  
Tel: 852-2389-4321  
Fax: 852-2341-9689

## 6 to 25 Amp Applications — Closed Loop

- Multirange Current Sensor
- Voltage Output
- Compact PCB Mount
- Single Supply ( $\pm 5V$ )
- CE EN50178 (pending)



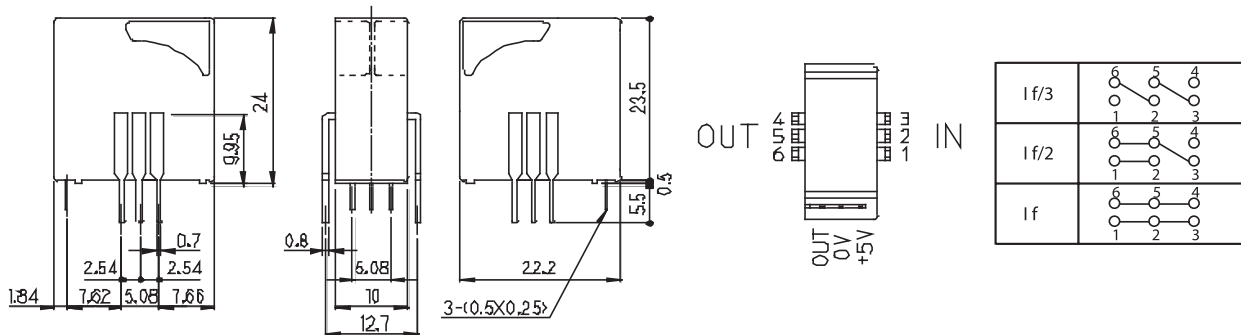
Specifications Measured at 25°C, RL=10K $\Omega$ , V<sub>CC</sub>=+5V

Specification	S22P006S05	S22P015S05	S22P025S05
Nominal Primary r.m.s. Current (I <sub>f</sub> )	$\pm 6A$	$\pm 15A$	$\pm 25A$
Maximum Current I <sub>f(max)</sub>	$\pm 18A$	$\pm 45A$	$\pm 75A$
Offset Voltage (I <sub>f</sub> =0) V <sub>REF</sub>	2.5V $\pm$ 30mV	2.5V $\pm$ 20mV	2.5V $\pm$ 15mV
Output Voltage V <sub>OUT</sub>		VREF $\pm$ 0.625V	
Output Voltage Accuracy <sup>1</sup> @ I <sub>f</sub> X		0.625V $\pm$ 10mV	
Output Linearity (0 to I <sub>f</sub> ) E <sub>L</sub>		$\pm$ 0.25%	
Power Supply V <sub>CC</sub>		$\pm$ 5V $\pm$ 5%	
Response Time t <sub>r</sub>		1 $\mu$ s	
Current Consumption I <sub>C</sub>		12.5mA Typ	
Output Temperature Characteristic ICEG		$\pm$ 0.05mV/ $^{\circ}$ C	
Offset Temperature Characteristic TC <sub>OUT</sub>	1.25mV/ $^{\circ}$ C	1.25mV/ $^{\circ}$ C	1.25mV/ $^{\circ}$ C
Hysteresis Allowance (I <sub>f</sub> =0 to I <sub>fmax</sub> ) V <sub>OH</sub>		$\leq$ 0.25mV	
Withstand Voltage (50/60Hz) V <sub>d</sub>		3,000VACrms for 1 minute (sensing current 0.5mA)	
Insulation Resistance @ 500VDC R <sub>IS</sub>		$\geq$ 500M $\Omega$	
Operating Bandwidth (1dB) f		DC - 200kHz	
Operating Temperature T <sub>A</sub>		-10 - +85 $^{\circ}$ C	
Storage Temperature T <sub>S</sub>		-25 - +100 $^{\circ}$ C	

<sup>1</sup> Without offset

### Package & Weight Information

QTY/Box	Weight/each(g)
100	8



### TAMURA CORPORATION

43352 Business Park Drive. | P.O. Box 892230 Temecula, CA 92589-2230 | www.tamuracorp.com  
 USA | Japan | United Kingdom | Hong Kong  
 Tel: 800-872-6624 | Tel: 81 (0)3 3978-2111 | Tel: 44 (0) 1380 731 700 | Tel: 852-2389-4321  
 Fax: 909-676-9482 | Fax: 81 (0)3 3923-0230 | Fax: 44 (0) 1380 731 702 | Fax: 852-2341-9689



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.