

3 to 25 Amp Applications — Open Loop

- Compact PCB Mount Design
- Dual Integrated Primary
- Withstanding Voltage of 2000 Vrms
- 3A - 25A with a Bipolar ± 15 VDC Supply Voltage
- Low Cost



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

| Specification | L07P003D15 | L07P005D15 | L07P010D15 | L07P015D15 | L07P020D15 | L07P025D15 |
|---|---|------------|------------|------------|------------|------------|
| Nominal Primary DC Current (If) | ± 3 A | ± 5 A | ± 10 A | ± 15 A | ± 20 A | ± 25 A |
| Maximum Current If(max) | ± 9 A | ± 15 A | ± 30 A | ± 45 A | ± 60 A | ± 75 A |
| Output Voltage @ If | $V_{OUT} = +4V \pm 0.05V, -4V \pm 0.150V$ (at If) | | | | | |
| Offset Voltage V_{OE} | $0 \pm 0.50V$ | | | | | |
| Accuracy @ If ¹ | $\pm 1\%$ of If | | | | | |
| Output Linearity ¹ (O..If Max) E_L | $\leq \pm 1\%$ (at 0A ~ If) | | | | | |
| Power Supply Vcc | $\pm 15V \pm 5\%$ | | | | | |
| Response Time T_r | $\leq 10\mu\text{sec}$ (di/dt = 10A / 5μsec) | | | | | |
| Current Consumption I_c | $\leq 30\text{mA}$ | | | | | |
| Output Temperature Characteristic TCE_G | $< \pm 0.1\% / ^\circ\text{C}$ | | | | | |
| Offset Temperature Characteristic V_{OT} | $\leq \pm 2\text{mV} / ^\circ\text{C TYP}$ | | | | | |
| Hysteresis Allowance @ If=0 V_{OH} | $\leq 30\text{mV}$ (0A = If) | | | | | |
| Withstand Voltage (50/60Hz) V_d | 2,000VACrms for 1 minute (Sensing Current 0.5mA) | | | | | |
| Insulation Resistance @ 500VDC R_{IS} | $\geq 500\text{MW}$ | | | | | |
| Operating Temperature T_A | $-10 \sim +80^\circ\text{C}$ | | | | | |
| Storage Temperature T_S | $-20 \sim +85^\circ\text{C}$ | | | | | |

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 | Ø PIN |
|-----------|--------------|
| 3A | Ø 0.6[0.024] |
| 5A | Ø 0.8[0.031] |
| 10A ~ 15A | Ø 1.4[0.055] |
| 20A ~ 25A | Ø 1.6[0.063] |



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

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 _{OE} | V _{OUT} ± 45mV | | | | | | | |
| Accuracy @ If ¹ | ± 1% | | | | | | | |
| Output Linearity ¹ (O.If Max) | ≤ ± 1% (at 0A ~ If) | | | | | | | |
| Power Supply Vcc | + 15V ±5% | | | | | | | |
| Response Time T _r | ≤ 5μsec (di/dt = 10A / 5μsec) | | | | | | | |
| Current Consumption I _c | ≤ 30mA | | | | | | | |
| Output Temperature Characteristic TCE _G | < ± 2mV / °C | | | | | | | |
| Offset Temperature Characteristic V _{OT} | ≤ ± 2mV / °C MAX | | | | | | | |
| Hysteresis Allowance @ If=0 V _{OH} | ≤ 15mV (0A = If) | | | | | | | |
| Withstand Voltage (50/60Hz) V _d | 2,000VACrms for 1 minute (Sensing Current 0.5mA) | | | | | | | |
| Insulation Resistance @ 500VDC R _{IS} | ≥ 500MΩ | | | | | | | |
| Operating Temperature T _A | -25 ~ +80°C | | | | | | | |
| Storage Temperature T _S | -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 ± 15 VDC Supply Voltage
- Low Cost

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

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

¹ Without offset

Package & Weight Information

| QTY/Box | Weight/each(g) |
|---------|----------------|
| CALL | CALL |

| TERMINAL | FUNCTION |
|----------|------------------|
| 1 | -V _{CC} |
| 2 | GND |
| 3 | +V _{CC} |
| 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] |



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 ± 15 VDC Supply Voltage
- Durable Busbar Construction



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

| Specification | L18P040D15 | L18P050D15 | L18P060D15 |
|---|--|-------------|-------------|
| Nominal Primary DC Current (If) | +40A | +50A | +60A |
| Maximum Current If(max) | ± 120 A | ± 150 A | ± 180 A |
| Output Voltage @ If | V _{OUT} ± 4.0 V ± 0.050 V | | |
| Offset Voltage | V _{OE} 0 ± 0.040 V | | |
| Accuracy @ If ¹ | X $\pm 1\%$ | | |
| Output Linearity ¹ (O..If Max) | E _L $\leq 1\%$ MAX | | |
| Power Supply | V _{CC} ± 15 V $\pm 5\%$ | | |
| Response Time | T _r $\leq 5\mu$ sec | | |
| Current Consumption | I _c ≤ 15 mA | | |
| Output Temperature Characteristic | TCE _G $< \pm 0.1\%$ / °C MAX | | |
| Offset Temperature Characteristic | V _{OT} $\leq \pm 1.5$ mV / °C MAX | | |
| Hysteresis Allowance @ If=0 | V _{OH} ≤ 40 mV (0A = If) | | |
| Withstand Voltage (50/60Hz) | V _d 3000VACrms for 1 minute (Sensing Current 0.5mA) | | |
| Insulation Resistance @ 500VDC | R _{IS} ≥ 500 M Ω | | |
| Operating Temperature | T _A -10 ~ +80°C | | |
| Storage Temperature | T _S -20 ~ +85°C | | |

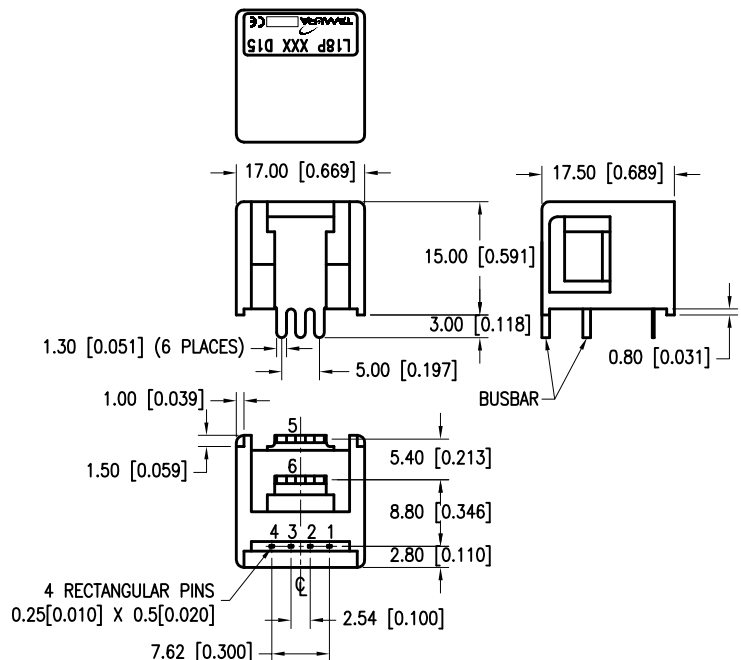
1. Without offset

Package & Weight Information

| QTY/Box | Weight/each(g) |
|---------|----------------|
| CALL | CALL |

| TERMINAL | FUNCTION |
|----------|------------------|
| 1 | -V _{CC} |
| 2 | GND |
| 3 | +V _{CC} |
| 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 ± 0.5 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

50 to 200 Amp Applications — Open Loop



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

Specifications Measured at 25°C, RL=10KΩ, V_{CC}=±15V

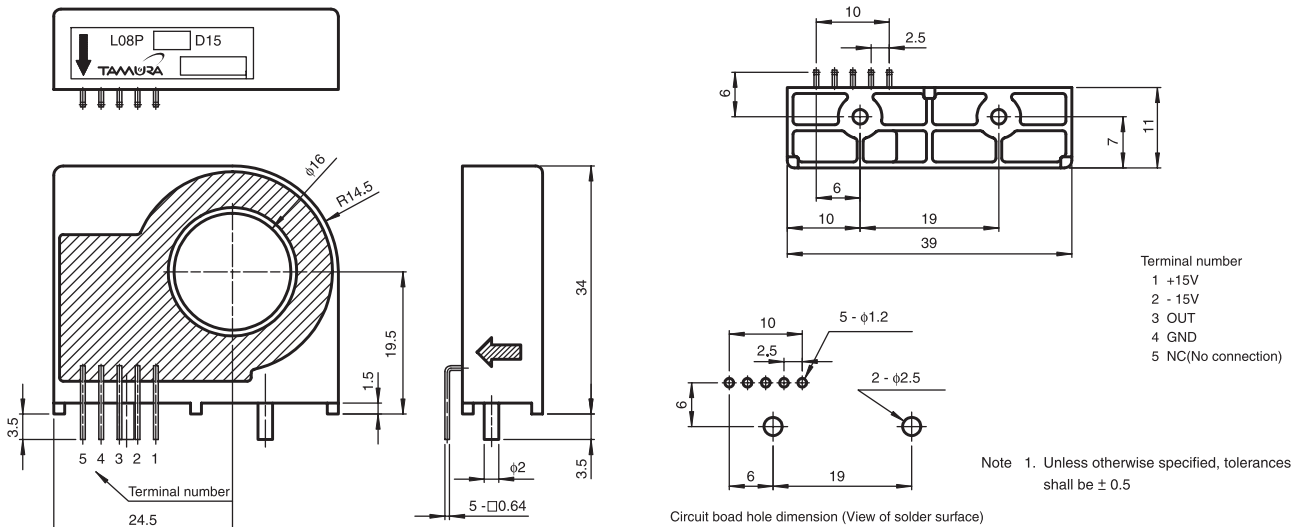
| Specification | | L08P050D15 | L08P100D15 | L08P150D15 | L08P200D15 |
|---|---------------------|--|--------------|------------|------------|
| Nominal Primary DC Current | (I _f) | 50AT | 100AT | 150AT | 200AT |
| Maximum Current | I _{f(max)} | ±150AT | ±300AT | ±350AT | ±350AT |
| Output Voltage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

¹ Small signal only; derating needed to avoid excessive core heating at high frequency

² 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

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

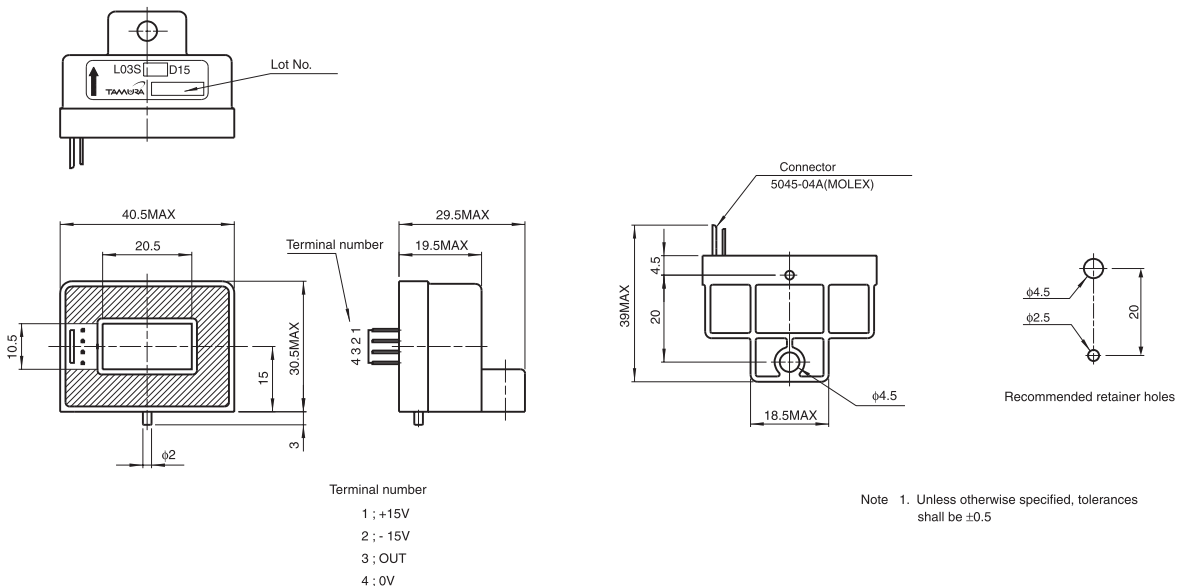
| Specification | L03S050D15 | L03S100D15 | L03S200D15 | L03S300D15 | L03S400D15 | L03S500D15 | L03S600D15 |
|--|--|------------|------------|------------|------------|------------|------------|
| Nominal Primary DC Current (If) | 50AT | 100AT | 200AT | 300AT | 400AT | 500AT | 600AT |
| Maximum Current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

¹ Small signal only; derating needed to avoid excessive core heating at high frequency

² 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 _{OE} | 2.5V±0.035V | | | | 2.5V±0.030V | | | |
| Accuracy @ If ² | X | <±1% of If | | | <±1% of If | | | |
| Output Linearity ² (0..If MAX) | E _L | | | ±1% of If | | | | |
| Power Supply Vcc | | | | 5V ±2.0% | | | | |
| Response Time t _r | | | | <5μs | | | | |
| Current Consumption I _c | | | | <15mA | | | | |
| Output Temperature Characteristic TCE _g | <±2mV / °C | | | <±1.5mV / °C | | | | |
| Offset Temperature Characteristic V _{OT} | <±2mV / °C | | | <±1mV / °C | | | | |
| Hysteresis Allowance @ If=0 V _{OH} | | ±8mV | | ±4mV | | | ±6mV | |
| Withstand Voltage (50/60Hz) V _d | | | | 2,500VACrms for 1 minute (sensing current 0.5mA) | | | | |
| Insulation Resistance @ 500VDC R _{IS} | | | | ≥500MΩ | | | | |
| Operating Bandwidth ¹ (-3dB) f | | | | DC - 50kHz | | | | |
| Operating Temperature T _A | | | | -10 - +80°C | | | | |
| Storage Temperature T _S | | | | -15 - +85°C | | | | |

¹ Small signal only; derating needed to avoid excessive core heating at high frequency

² 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 Ω , 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 _{OUT} | 50mA | 75mA | 100mA | 150mA |
| Conversion Ratio | K _n | 1:2000 | 1:2000 | 1:2000 | 1:2000 |
| Accuracy | X | $\pm 1\%$ of If | | | |
| Offset Current (If=0) ¹ | I _o | $\pm 0.5mA$ | | | |
| Output Linearity ¹ (0..If) | E _L | $\pm 0.25\%$ of If | | | |
| Power Supply | V _{CC} | $\pm 15V \pm 5\%$ ² | | | |
| Response Time | t _r | $\leq 1\mu s$ | | | |
| Current Consumption | I _c | $\pm 16mA$ ³ | | | |
| Output Temperature Characteristic | TC _{OUT} | $\pm 0.025\% / ^\circ C$ @ If=0 (Ta=-5 to +70°C) | | | |
| Offset Temperature Characteristic | I _{OT} | $\pm 0.025mA / ^\circ C$ @ If=0 (Ta=-5 to +70°C) | | | |
| Hysteresis Allowance If=0 - Ifmax) | I _{OH} | $\leq 0.3mA$ | | | |
| Withstand Voltage (50/60Hz) | V _d | 2,500VACrms for 1 minute (sensing current 0.5mA) | | | |
| Insulation Resistance @ 500VDC | R _{IS} | 500M Ω | | | |
| 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 | TBD Ohms @ Ta = 70°C (Contact Tamura for additional info) | | | |

¹ Without Offset

² Ifmax is Restricted by V_{CC}

³ Output Current not included

Package & Weight Information

| QTY/Box | Weight/each(g) |
|---------|----------------|
| 50 | 25 |



Note 1. Unless otherwise specified, tolerances shall be ± 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 ⁴ | X | | | $< \pm 1\%$ of If | | |
| Output Linearity ⁴ (0..MAX) | E_L | | | $\pm 0.25\%$ | | |
| Power Supply | V_{CC} | | | $12V$ or $\pm 15V \pm 5\%$ ² | | |
| Response Time @ $di/dt=50A/\mu Sec$ | t_r | | | $1\mu s$ | | |
| Current Consumption | I_c | | | $\pm 16mA$ ³ | | |
| 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 Ω | | |
| 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 | | | ¹ Ohms @ 70°C (Contact Tamura Tech Support) | | |

¹ TBD

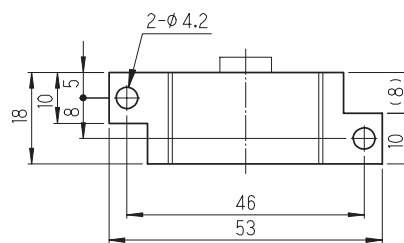
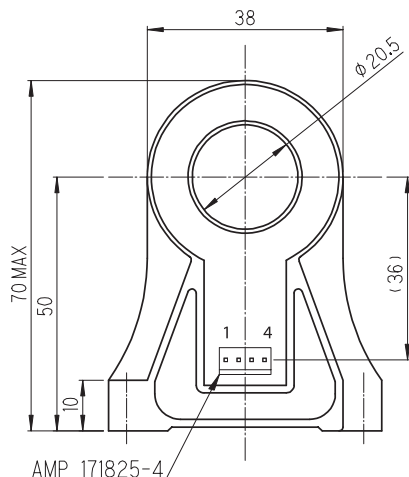
² Ifmax is Restricted by Vcc

³ Output Current not included

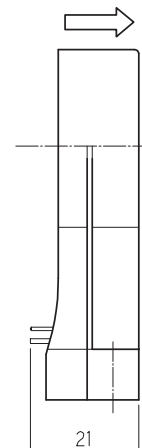
⁴ Without offset

Package & Weight Information

| QTY/Box | Weight/each(g) |
|---------|----------------|
| TBD | 46 |



Note Unless otherwise specified, tolerances shall be ± 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-10KΩ, V_{CC}=+5V

| Specification | S22P006S05 | S22P015S05 | S22P025S05 |
|--|------------|--|------------|
| Nominal Primary r.m.s. Current (I _f) | ±6A | ±15A | ±25A |
| Maximum Current I _{f(max)} | ±18A | ±45A | ±75A |
| Offset Voltage (I _f =0) V _{REF} | 2.5V±30mV | 2.5V±20mV | 2.5V±15mV |
| Output Voltage V _{OUT} | | VREF ± 0.625V | |
| Output Voltage Accuracy ¹ @ I _f X | | 0.625V ±10mV | |
| Output Linearity (0 to I _f) E _L | | ±0.25% | |
| Power Supply V _{CC} | | ±5V±5% | |
| Response Time t _r | | 1μs | |
| Current Consumption I _C | | 12.5mA Typ | |
| Output Temperature Characteristic ICEG | | ±0.05mV/°C | |
| Offset Temperature Characteristic TC _{OUT} | 1.25mV/°C | 1.25mV/°C | 1.25mV/°C |
| Hysteresis Allowance (I _f =0 to I _{fmax}) V _{OH} | | ≤ 0.25mV | |
| Withstand Voltage (50/60Hz) V _d | | 3,000VACrms for 1 minute (sensing current 0.5mA) | |
| Insulation Resistance @ 500VDC R _{IS} | | ≥500MΩ | |
| Operating Bandwidth (1dB) f | | DC - 200kHz | |
| Operating Temperature T _A | | -10 - +85°C | |
| Storage Temperature T _S | | -25 - +100°C | |

¹ 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 «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «**JONHON**», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «**FORSTAR**».



JONHON

«**JONHON**» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«**FORSTAR**» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: ocean@oceanchips.ru

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А