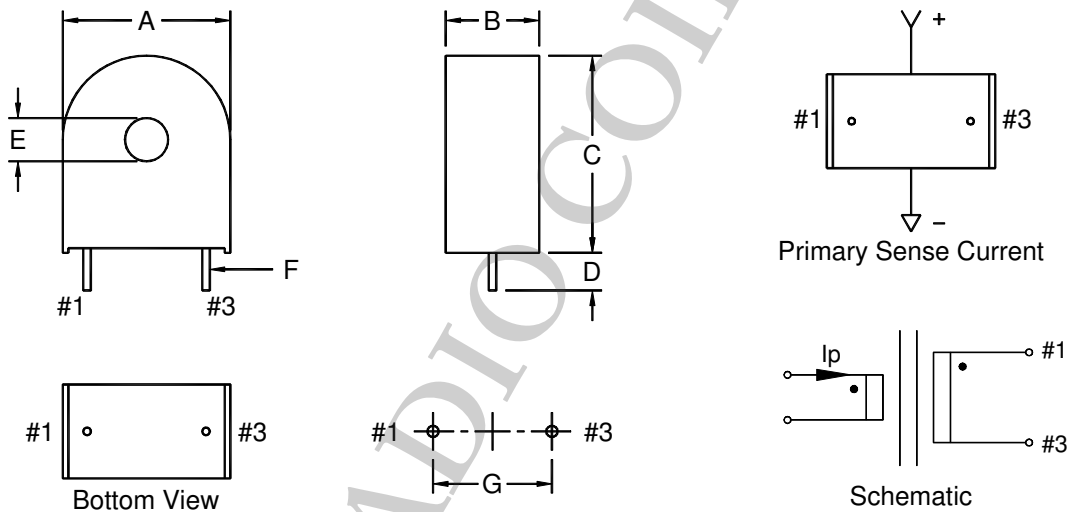


TL59 Series

- Rated voltage for up to 600 Vrms
- Operating frequency up to 500 kHz
- Sense up to 200 Amps RMS
- Dielectric Strength : >2500 Vrms
- Insulation class: Class B (130°C)
- Ambient temperature: -25°C to +70°C
- With RoHS complied
- Custom-made are available upon request

Fig 1



| | A | B | C | D | E | F | G | Weight (g) |
|-----------------------|------|------|------|------|------|-------|-------|------------|
| Dimension (mm) | 18.2 | 10.4 | 21.3 | 3.5 | Ø4.3 | Ø0.8 | 12.7 | 6 |
| Tolerance (mm) | max. | max. | max. | min. | min. | ± 0.1 | ± 0.5 | approx. |

| Part Number | Transfer Ratio Pri : Sec (± 1%) | Secondary Current (mA, max.) | Secondary Inductance (mH, min.) | Secondary DC Resistance (Ω, max.) | Secondary Excitation | | Dielectric Strength Vrms (V) |
|-------------|---------------------------------------|------------------------------------|---------------------------------------|---|----------------------|-----------------------|------------------------------------|
| | | | | | 25kHz (μVS, max.) | 100kHz (μVS, max.) | |
| TL59-50 | 50 | 300 | 5.5 | 0.6 | 300 | 150 | 2500 |
| TL59-100 | 100 | 150 | 22 | 1.4 | 600 | 300 | 2500 |
| TL59-150 | 150 | 100 | 50 | 3.0 | 750 | 375 | 2500 |
| TL59-200 | 200 | 75 | 89 | 5.0 | 1200 | 600 | 2500 |
| TL59-300 | 300 | 50 | 200 | 12.0 | 1800 | 900 | 2500 |
| TL59-500 | 500 | 30 | 550 | 30.0 | 3000 | 1500 | 2500 |
| TL59-750 | 750 | 20 | 1125 | 70.0 | 4500 | 2250 | 2500 |

Fig II (Through Pin Style)

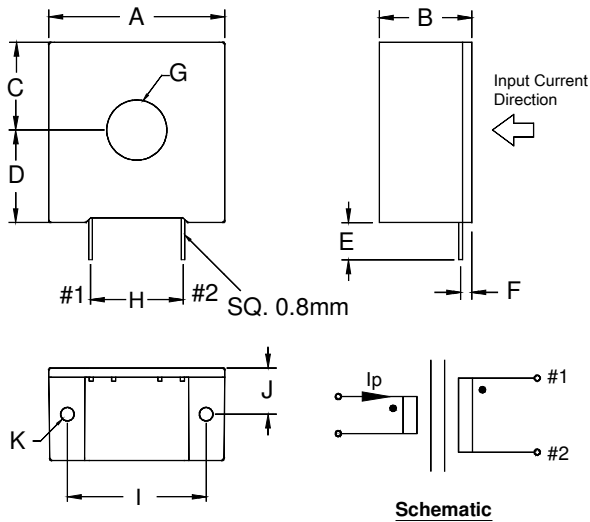
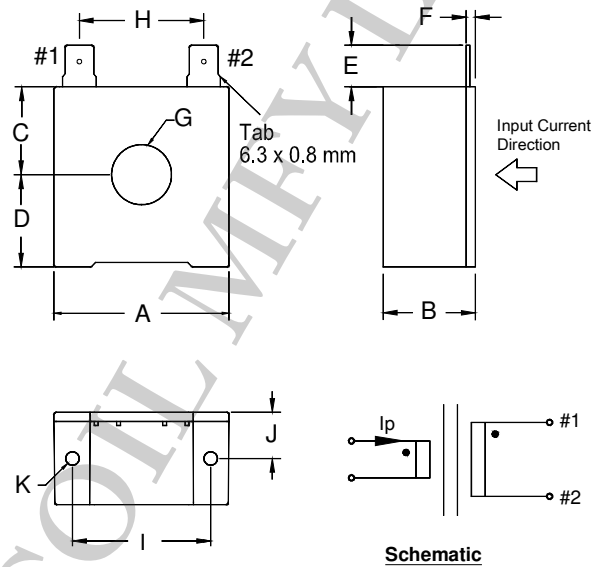


Fig III (Faston Tab Style)



| Product Series | | Dimension (mm) | | | | | | | | | | | Weight (g) |
|------------------|---------|----------------|------|------|------|------|------|-------|------|------|------|------|------------|
| | | A | B | C | D | E | F | G | H | I | J | K | |
| TL59-01P | Fig II | 32.5 | 18.5 | 17.0 | 16.5 | 8.0 | 2.4 | Ø9.0 | 20.0 | 28.0 | 10.0 | Ø2.9 | 39 |
| TL59-01T | Fig III | 32.5 | 18.5 | 17.0 | 16.5 | 9.0 | 2.0 | Ø9.0 | 21.0 | 28.0 | 10.0 | Ø2.9 | 39 |
| TL59-02P | Fig II | 38.0 | 20.0 | 19.0 | 20.0 | 8.0 | 2.4 | Ø13.0 | 20.0 | 30.0 | 10.0 | Ø2.9 | 55 |
| TL59-02T | Fig III | 38.0 | 20.0 | 19.0 | 20.0 | 9.0 | 2.0 | Ø13.0 | 27.0 | 30.0 | 10.0 | Ø2.9 | 55 |
| Tolerance | | ±1.0 | ±1.0 | ±1.0 | ±1.0 | ±1.0 | ±0.2 | ±1.0 | ±1.0 | ±1.0 | ±0.2 | ±0.1 | approx. |

| Part Number | Rated Primary Current | Pri : Sec Turns Ratio | Secondary Inductance (@ 1kHz / 1V) | Secondary DC Resistance (@ 25°C) | Min. Secondary Transfer Area (@ B _{MAX} . 25°C) | Working Frequency | Max. Rated Voltage | Burden Resistance | Dielectric Strength |
|---------------|-----------------------|-----------------------|------------------------------------|----------------------------------|--|-------------------|--------------------|-------------------|---------------------|
| | I _p (A) | | | | | | | | |
| TL59-01X-0050 | 70 | 1 : 50 | 10.3 | 0.07 | 887.5 | 5 ~ 500 | 1000 | 0.2 | 4000 |
| TL59-01X-0100 | 70 | 1 : 100 | 39.67 | 0.30 | 1775 | 5 ~ 200 | 1000 | 1.0 | 4000 |
| TL59-01X-0200 | 70 | 1 : 200 | 130.3 | 0.97 | 3550 | 5 ~ 50 | 1000 | 3.0 | 4000 |
| TL59-01X-0500 | 70 | 1 : 500 | 937.3 | 5.81 | 8875 | 5 ~ 20 | 1000 | 25.0 | 4000 |
| TL59-01X-1000 | 70 | 1 : 1000 | 3581 | 25.28 | 17750 | 5 ~ 10 | 1000 | 50.0 | 4000 |
| TL59-02X-0100 | 100 | 1 : 100 | 31.1 | 0.27 | 2964 | 5 ~ 60 | 1000 | 0.4 | 4000 |
| TL59-02X-0200 | 100 | 1 : 200 | 121.2 | 1.17 | 5928 | 1 ~ 25 | 1000 | 3.0 | 4000 |
| TL59-02X-0500 | 100 | 1 : 500 | 1040 | 7.8 | 14820 | 1 ~ 20 | 1000 | 20.0 | 4000 |
| TL59-02X-1000 | 100 | 1 : 1000 | 3540 | 27.99 | 29640 | 1 ~ 10 | 1000 | 80.0 | 4000 |

Note: Items with "X" indicate that P – Through pin style; T – Faston tab style