

High Frequency Power Transformer – PT4160

Special Features:

- Primary rated voltage: 800 V
- Nominal output power: S = 15,9 kVA
- Operating frequency: 40 – 200 kHz
- Compliant with:
 - IEC 61010-1:2010
 - PN-EN 61010-1:2011
 - RoHS and REACH
- Strengthen insulation
- Low profile
- Heat sink / cold plate cooling ready

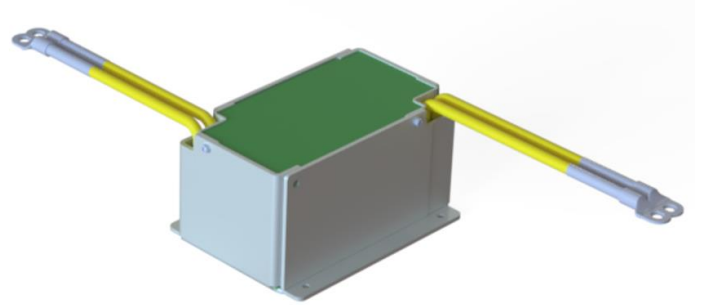


Figure 1. General view

Typical Applications:

- Switch Mode Power Supplies
- AC/DC converters

For samples or custom solutions please contact directly:
inquiry@sma-magnetics.com

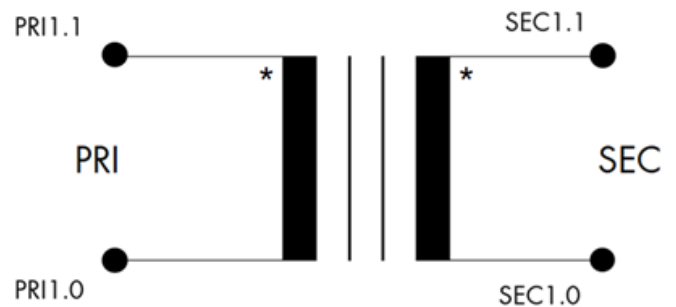


Figure 2. Electrical circuit



| Parameter description | Parameter | | Comment |
|-----------------------------------|---|------------------------------|---|
| Circuits | PRI | SEC | - |
| Windings | PRI1.0 - PRI1.0 | SEC1.0 - SEC1.0 | Błąd! Nie można odnaleźć źródła odwołania. |
| Max. supply voltage (rms) | 800 V | - | - |
| Max. supply voltage (peak) | 880 V | - | - |
| Frequency range | 40 - 200 kHz | | - |
| Rated output voltage/current | - | 800 V / 25 A 400 V / 50 A | - |
| Turns ratio (PRI : SEC) | (9 : 11) | | Routine test |
| Winding resistances (DC) | $\leq 6 \text{ m}\Omega$ | $\leq 9.6 \text{ m}\Omega$ | Routine test, given values are valid for 20°C (resistance temperature coefficient 0.003931/K) |
| Main Inductance | 600 μH ($\pm 15\%$) | - | Routine test at 0.3 V, 40 kHz sine voltage |
| Leakage Inductance (PRI to SEC) | $\leq 5 \text{ }\mu\text{H}$ (typical value 1.4 μH) | | Routine test at 5 mA, 40 kHz sine voltage |
| Coupling capacitance (PRI to SEC) | $\leq 830 \text{ pF}$ (typical value 750 pF) | | Routine test at 0.3 V, 40 kHz sine voltage |
| Insulation class | B (130°C) | | - |
| Dielectric strength between | PRI to SEC - 5 kVAC (50Hz) PRI and SEC to Housing- 5 kVAC (50Hz) | | min. 1 sec. as routine test min. 60 sec. as type test |

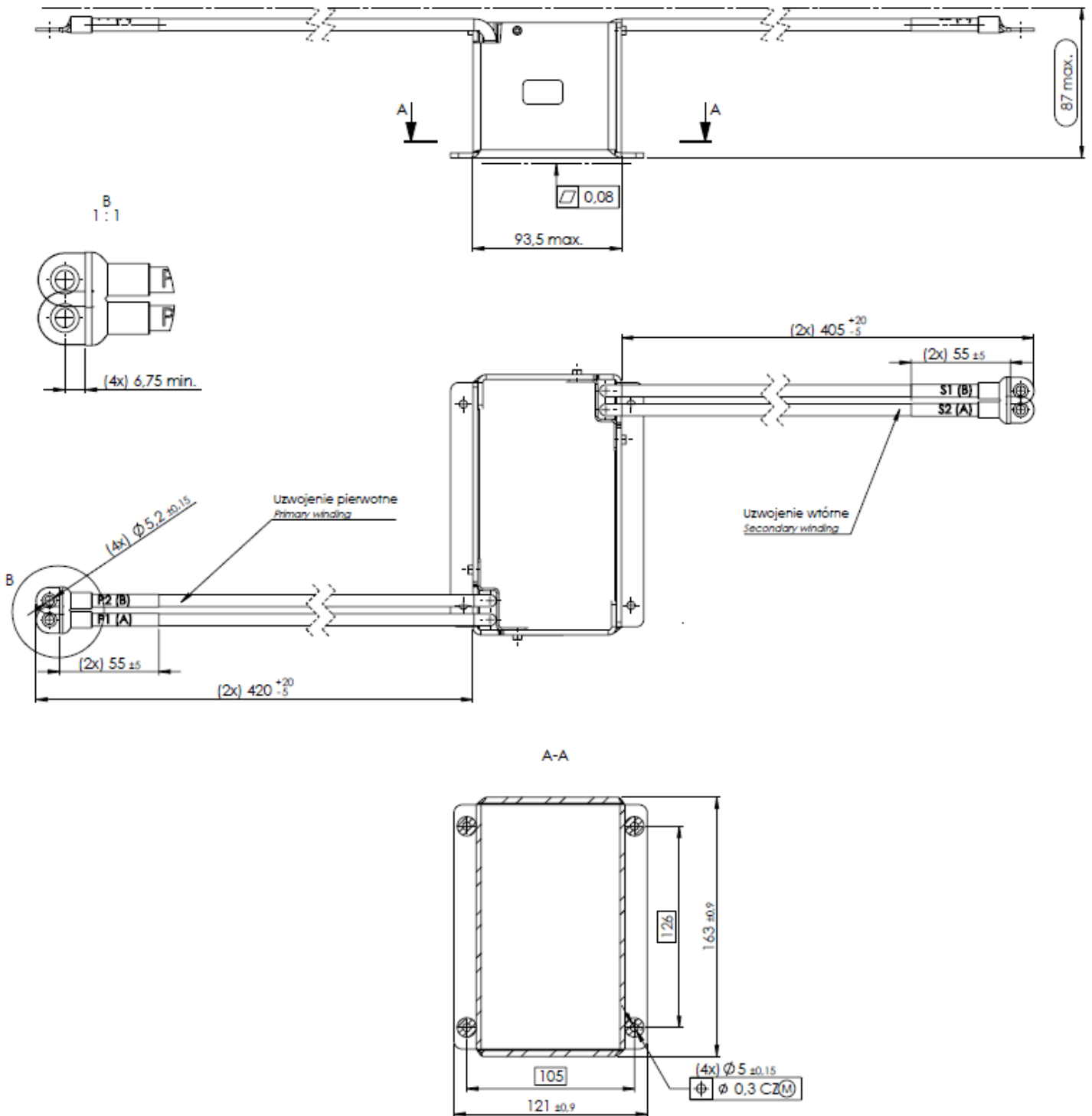


Figure 3. High frequency transformer dimensions in mm