

MGA CT EI 192-50A

Coupling Transformer

MIL-STD-461G, DO-160

- For tests according MIL-STD-461G and DO-160 with the MGA 1033
- High saturation flux density
- Low leakage impedance

**Tests in combination with the
MGA 1033**



Overview

Coupling transformers are used to couple sinusoidal noise signals to supply lines. This type of immunity test can be found in many automotive standards such as MIL-STD-461G or DO-160.

The special design of the EI192 provides high saturation flux density and low leakage impedance.

Key facts

- High saturation flux density
- Low leakage impedance due to special design
- Insulation voltage of 2,500 volts at 60 seconds



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Technical data

CT EI 192-50A

Frequency response 10 Hz – 250 kHz

Turns ratio 2:1 step down

Insulation voltage 2.500 Volt (60 s)

Terminals M10 Gewindestift

Dimensions (WxDxH) 16 x 12.5 x 20 cm

Weight approx. 17 kg

Primär

Inductance approx. 8 mH (unloaded)

DC Resistance 0.048 Ohm

Current rating 28 A_{rms}

Sekundär

Inductance approx. 2 mH (unloaded)

DC Resistance 0.012 Ohm

Current rating 140 Ap, no saturation
(DC + AC > 300 Hz,
Figure 4)

70 Ap, no saturation
(DC + AC > 20 Hz,
Figure 5)

79 Ap, saturation
(DC + AC > 20 Hz,
Figure 6)

Connections

1 – 2 Primary Windings

3-4 Secondary windings



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Primary impedance measurement

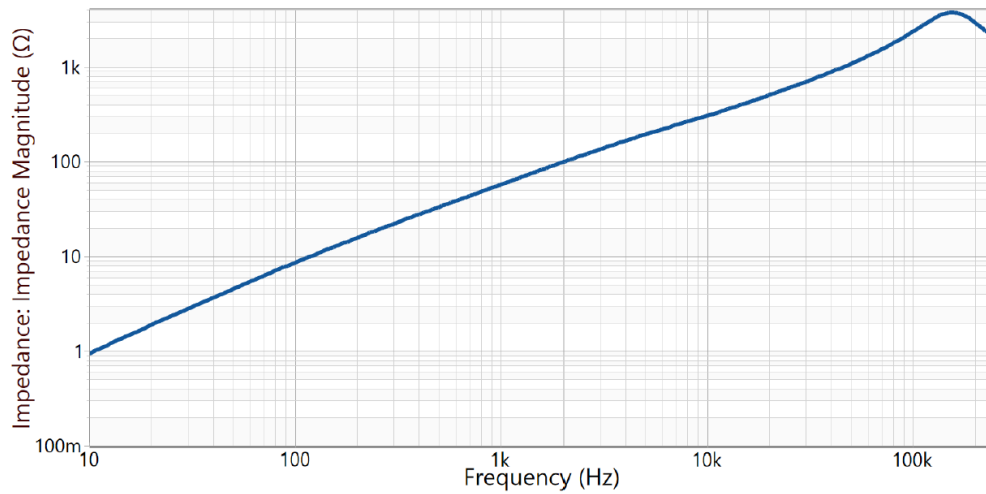


Figure 1: Primary impedance measurement up to 250 kHz, Secondary open

Secondary impedance measurement

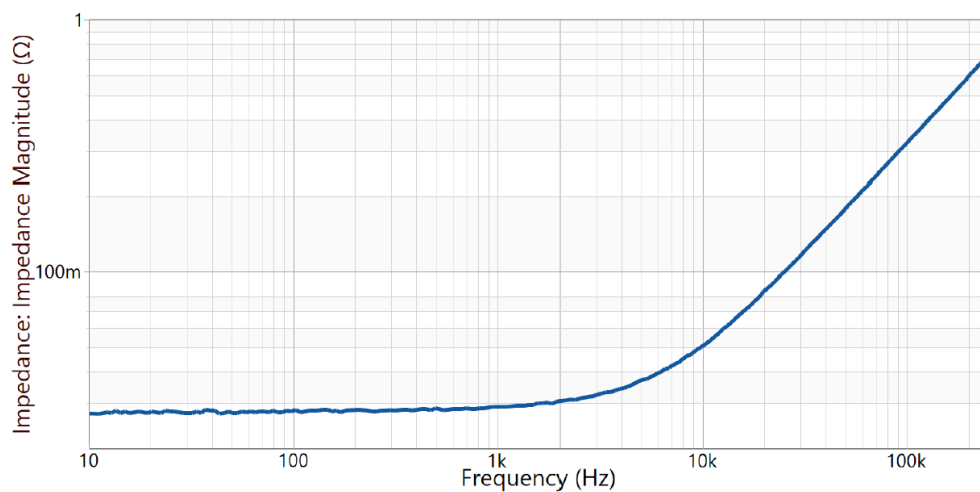


Figure 2: Secondary impedance measurement up to 250 kHz, Primary short circuit

Test setup saturation behaviour

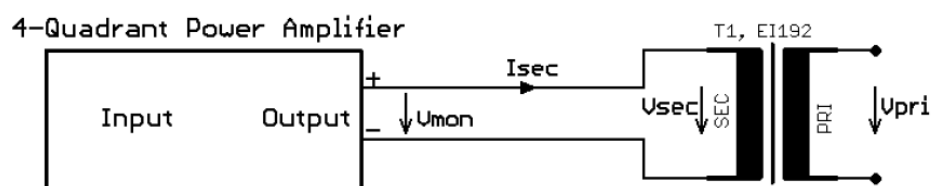


Figure 3: Test setup for determining the saturation behaviour



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Test results

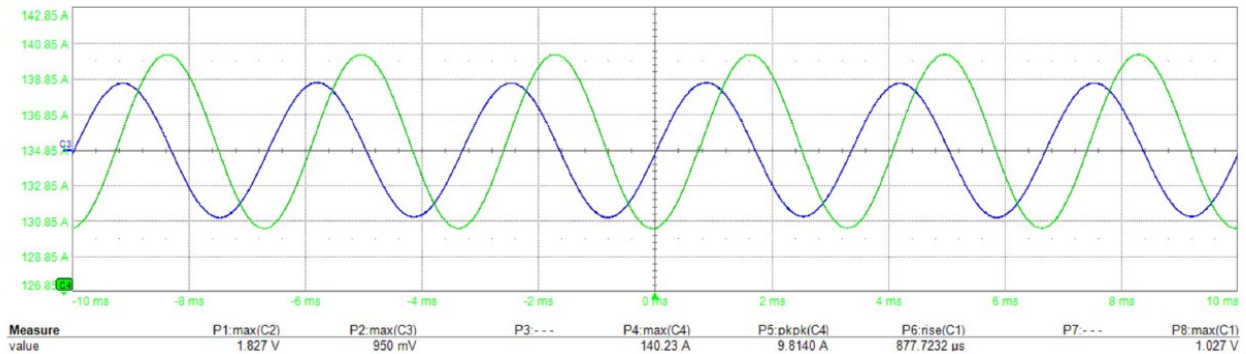


Figure 4: Blue (C3): Vsec; Green (C4): Isec; Input: 300 Hz + DC

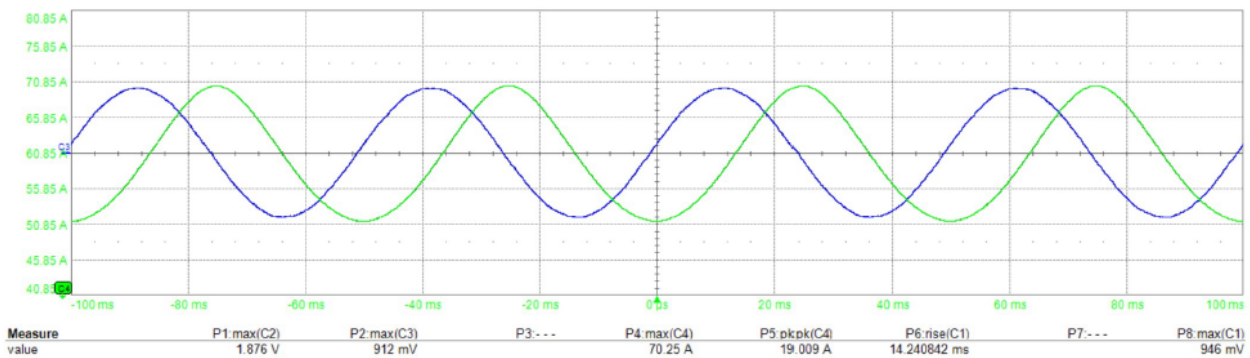


Figure 5: Blue (C3): Vsec; Green (C4): Isec; Input: 20 Hz + DC

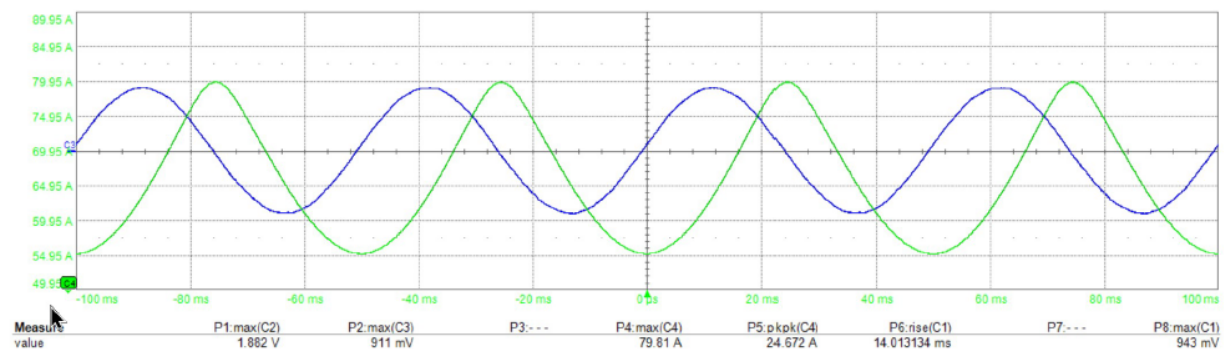


Figure 6: Blue (C3): Vsec; Green (C4): Isec; Input: 20 Hz + DC

All information regarding appearance and technical data correspond to the current state of development at the time of release of this data sheet. We reserve the right to make technical changes. 242406

