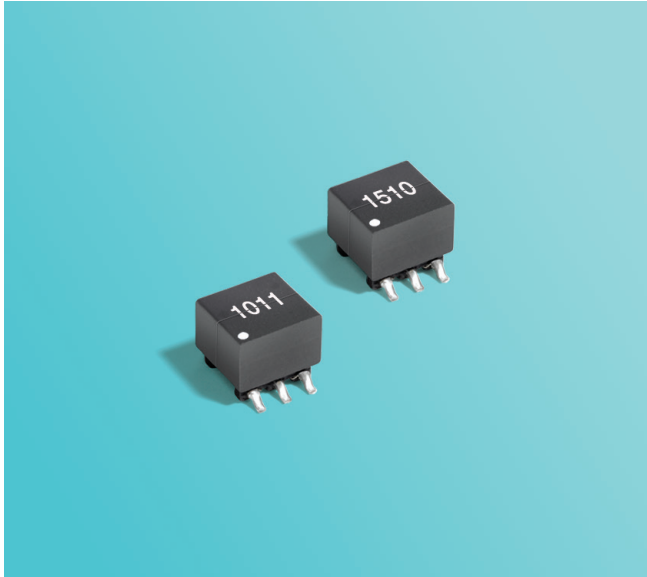


# Outgassing Compliant Gate Drive Transformers



- Designed for high switching speed, transformer coupled MOSFET and IGBT gate drive circuits.
- Operating frequency: 50 kHz – 2 MHz
- Primary to secondary isolation: 1500 Vdc. For 1011 and 2011, isolation between secondaries is 500 Vdc

**Core material** Ferrite

**Terminations** Tin-lead over tin over nickel over phos bronze. Other terminations are available at additional cost

**Weight** 535 – 615 mg

**Ambient temperature** -55°C to +125°C

**Maximum part temperature** +125°C (ambient + temp rise).

**Storage temperature** Component: -55°C to +125°C.

Tape and reel packaging: -55°C to +80°C

**Resistance to soldering heat** Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

**Packaging** 250/7" reel Plastic tape: 16 mm wide, 0.36 mm thick, 20 mm pocket spacing, 5.54 mm pocket depth

Part number <sup>1</sup>	Turns ratio pri : sec	Primary inductance <sup>2</sup> min (µH)	Leakage inductance <sup>3</sup> max (µH)	Primary DCR max (Ohms)	Secondary DCR max (Ohms)	Volt-time product (V-µsec)	SRF min <sup>4</sup> (MHz)	Capacitance pri to sec max (pF)
CP-N0531-1010SZ	1 : 1	296.0	1.5	0.795	0.655	25.8	1.75	14.0
CP-N0531-1510SZ	1.5 : 1	680.0	4.0	1.65	0.860	40.8	1.00	14.0
CP-N0531-1011SZ	1 : 1 : 1	264.0	0.30	1.50	1.50 (2-5); 3-4	24.5	2.50	95.0
CP-N0531-2011SZ	2 : 1 : 1	330.0	0.60	1.40	0.650 (2-5); 0.790 (3-4)	24.5	2.00	18.0

1. When ordering, please specify **terminations** and **screening** codes:

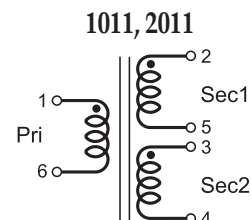
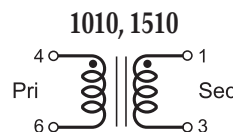
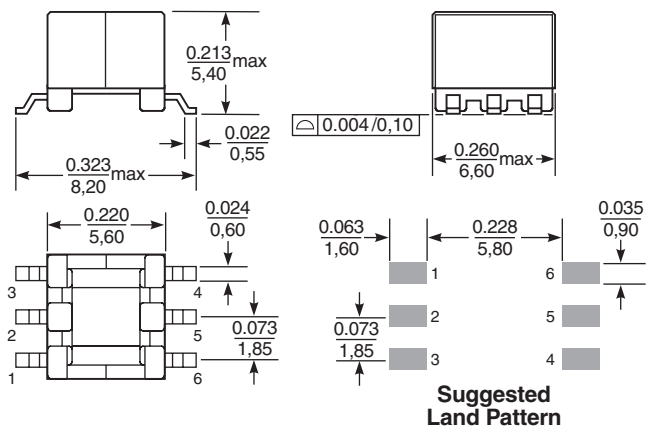
**CP-N0531-2011SZ**

**Termination:** S = Tin-lead over tin over nickel over phos bronze or  
 T = Tin-silver-copper over tin over over nickel over phos bronze  
 L = Tin-silver over tin over over nickel over phos bronze

**Screening:** Z = Unscreened

- H = Coilcraft CP-SA-10001 Group A
- 1 = EEE-INST-002 (Family 1) Level 1
- 2 = EEE-INST-002 (Family 1) Level 2
- 3 = EEE-INST-002 (Family 1) Level 3
- 4 = MIL-STD-981 (Family 03) Class B
- 5 = MIL-STD-981 (Family 03) Class S
- F = ESCC3201 (F4 operational life performed at 105°C)
  - Screening performed to the document's latest revision.
  - Lot qualification (Group B) available.
  - Testing T and U have been replaced with more detailed codes 4, 5, and 1, 2, 3, respectively. Codes T and U can still be used, if necessary. Custom testing also available.

- Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc
  - Leakage inductance measured at 100 kHz, 0.1 Vrms with secondary pins shorted.
  - SRF is for the primary, measured with the secondary shorted using an Agilent/HP 4192 or equivalent.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



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