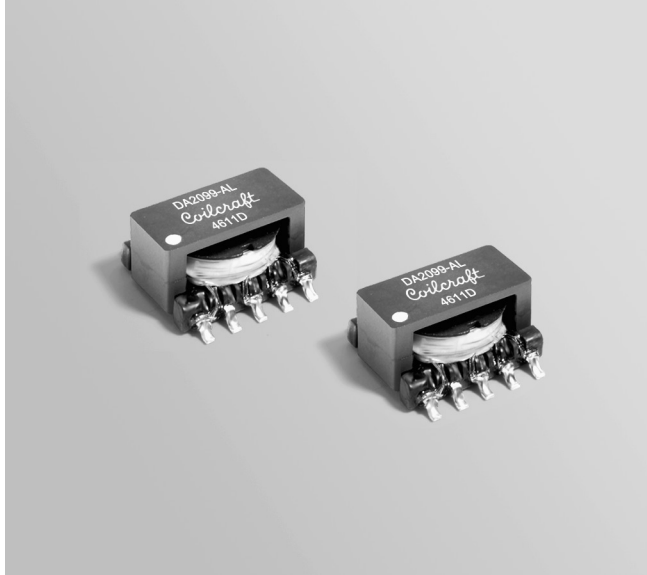


# Gate Drive Transformer

For ON Semiconductor  
NCP1652 and NCP4302



- Designed for ON Semiconductor for use with the NCP1652 PFC Controller and the NCP4302 Flyback Controller.
- Requires only 1.5 cm<sup>2</sup> of board space
- 1500 Vrms primary to secondary isolation
- Can be used from 20 kHz to 250 kHz.

**Core material** Ferrite

**Terminations** RoHS compliant tin-silver (96.5/3.5) over tin over nickel over phos bronze. Other terminations available at additional cost.

**Weight** 1.35 g

**Ambient temperature** -40°C to +125°C

**Storage temperature** Component: -40°C to +125°C.

Tape and reel packaging: -40°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)

**Failures in Time (FIT) / Mean Time Between Failures (MTBF)**

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

**Packaging** 500/13" reel; Plastic tape: 24 mm wide, 0.36 mm thick, 20 mm pocket spacing, 6.13 mm pocket depth

**PCB washing** Tested with pure water or alcohol only. For other solvents, see Doc787\_PCB\_Washing.pdf

Part number <sup>1</sup>	Turns ratio	Primary inductance <sup>2</sup> ±20 % (mH)	Leakage inductance <sup>3</sup> max (µH)	Primary DCR max (Ohms)	Secondary DCR max (Ohms)	Volt-time product <sup>4</sup> (V-µsec)	Capacitance pri to sec <sup>5</sup> max (pF)
DA2099-AL_	1 : 1	3.79	13.0	2.30	2.85	221	13.0

1. When ordering, please specify packaging code:

**DA2099-ALD**

**Packaging:** D = 13" machine ready reel. EIA-481 embossed plastic tape (500 per full reel).

B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.

- Inductance measured at 100 kHz, 0.3 Vrms, 0 Adc
  - Leakage inductance measured at 100 kHz, 0.3 Vrms with secondary pins shorted.
  - Based on Bs<sub>at</sub> of the core at 25°C and number of turns of the primary.
  - Capacitance measured at 100 kHz, 0.3 Vrms.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

