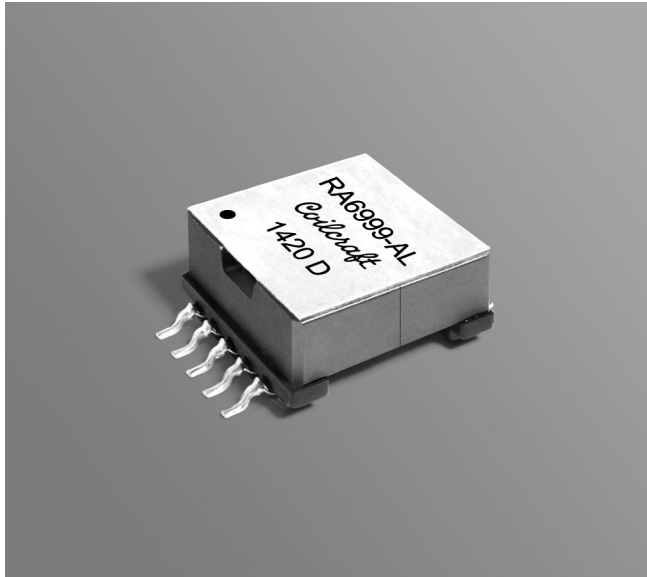


# Forward Mode Transformer

For Maxim MAX17599  
PWM Controller



- Forward mode transformer for the Maxim MAX17599 Active Clamp Current-Mode PWM Controller
- 18 – 36 V input; 12 V, 3.3 A output
- 1500 Vrms, one minute isolation from primary to secondary and gate windings
- Specified on reference design MAXREFDES48#

**Core material** Ferrite

**Terminations** RoHS tin-silver (96.5/3.5) over tin over nickel over phos bronze.

**Weight** 10.5 g

**Ambient temperature** –40°C to +85°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** 175 per 13" reel Plastic tape: 44 mm wide, 0.4 mm thick, 28 mm pocket spacing, 11.9 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> | Inductance at 0A <sup>2</sup> min (μH) | DCR max (mOhms) |      |      | Leakage inductance max (μH) | Turns ratio |            | Output <sup>3</sup> |
|--------------------------|--|-----------------|------|------|-----------------------------|-------------|------------|---------------------|
|                          |  | pri             | sec  | gate |                             | pri : sec   | pri : gate |                     |
| RA6999-AL_               | 70                                     | 20.5            | 29.5 | 36.4 | 0.35                        | 1:1.125     | 1:0.375    | 12 V, 3.3 A         |

1. When ordering, please specify a **packaging** code:

**RA6999-ALD**

**Packaging:** D = 13" machine ready reel. EIA-481 embossed plastic tape (175 parts 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.

2. Inductance is measured at 250 kHz, 0.1 Vrms.

3. Output is for the secondary winding. Output of the gate winding is 4 V, 0.25 A

4. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

