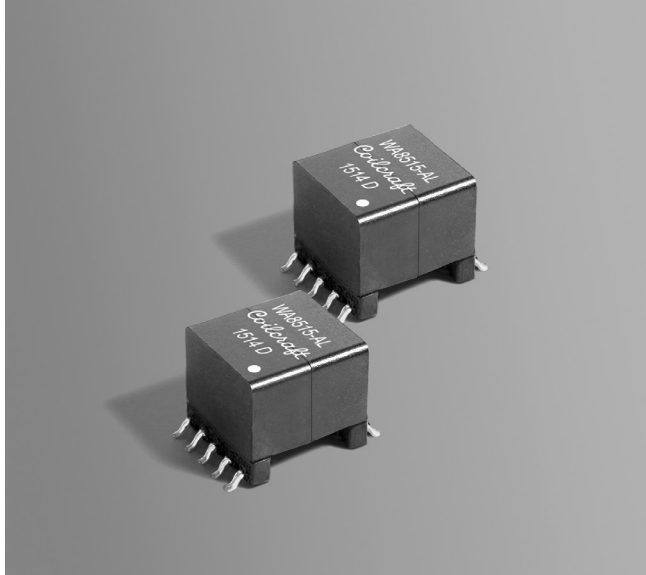




# 25 W Forward Mode Transformer for TI TPS23754 PWM Controller



- Designed for forward topology operating at 250 kHz
- Developed for use with Texas Instruments TPS23754 PWM Controller
- 20 – 57 V input; excellent for PoE applications
- 1500Vrms, one minute isolation primary and bias to secondary

**Core material** Ferrite

**Terminations** RoHS tin-silver-copper over tin over nickel over phos bronze. Other terminations available at additional cost.

**Weight** 6.7 g

**Ambient temperature** –40°C to +85°C

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

**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

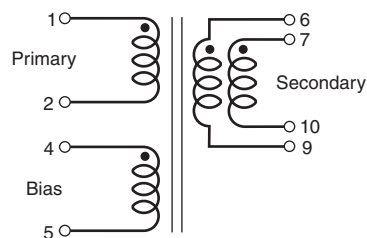
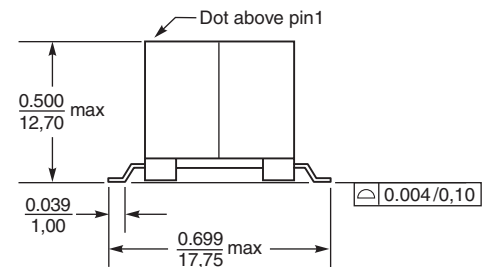
**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

**Packaging** 175 per 13" reel Plastic tape: 32 mm wide, 0.6 mm thick, 28 mm pocket spacing, 13.40 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).

| Part number | Inductance <sup>1</sup><br>min (µH) | DCR max (mOhms) <sup>2</sup> |     |      | Leakage inductance <sup>3</sup><br>max (µH) | Input voltage range (V) | Turns ratio <sup>4</sup> |            | Output <sup>5</sup> |
|-------------|-------------------------------------|------------------------------|-----|------|---|-------------------------|--------------------------|------------|---------------------|
|             |                                     | pri                          | sec | bias |   |                         | pri : sec                | pri : bias |                     |
| WA8515-ALD  | 90                                  | 146                          | 25  | 494  | 0.816                                       | 20 – 57                 | 1 : 0.406                | 1 : 0.813  | 5.0 V, 4.8 A        |

1. Inductance is measured at 250 kHz, 0.1 Vrms, 0 Adc.
  2. DCR for the secondary is measured with the windings connected in parallel.
  3. Leakage inductance is for the primary and is measured with the secondary shorted.
  4. Turns ratio is with the secondary windings connected in parallel.
  5. Output is with the secondary windings connected in parallel. Bias winding output is 12 V, 20 mA.
  6. Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Secondary windings to be connected in parallel on PCB board.

