

# Flyback Transformer

For TI UCC28600  
Flyback Green Mode Controller

The FA2443-AL was developed specifically for Texas Instruments UCC28600 Quasi-Resonant Flyback Green Mode Controller and is specified in SLUU256A for the

evaluation module. This transformers is designed to operate in discontinuous conduction mode at frequencies up to 140 kHz.

Part number	Inductance at 0A <sup>1</sup> ±10% (µH)	Inductance at Ipk <sup>2</sup> min (µH)	DCR max (Ohms)	Leakage inductance <sup>3</sup> max (µH)	Turns ratio		Ipk <sup>2</sup> (A)	Isolation <sup>5</sup> Vrms	Output
					pri : sec <sup>4</sup>	pri : bias			
FA2443-AL	200	162	0.217 (4–6) 0.020 (8–13) 0.020 (9–14) 0.515 (1–7)	5.9	6 : 1	6 : 1	6.0	1500	120 W

1. Inductance is for the primary, measured at 10 kHz, 0.1 Vrms, 0 Adc.
  2. Peak primary current drawn at minimum input voltage.
  3. Leakage inductance is for the primary and is measured at 100 kHz, 0.1 Vrms with all other windings shorted.
  4. Turns ratio for the secondary is with the windings connected in parallel.
  5. Isolation is from the primary to all other windings, tested for one minute.
  6. Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

**Core material** Ferrite

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

**Weight** 89.2 g

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

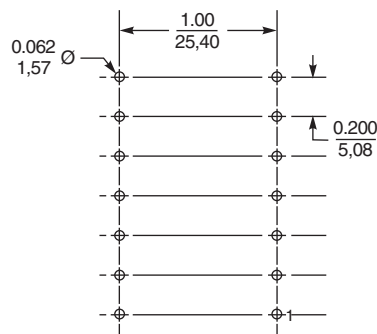
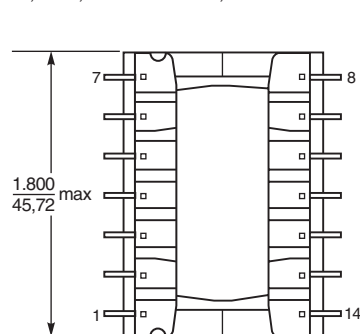
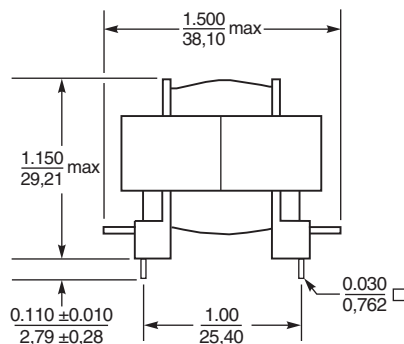
**Storage temperature** Component: –40°C to +85°C.

Tray packaging: –40°C to +80°C

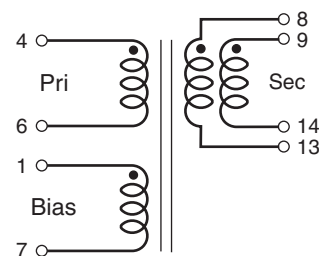
**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

**Packaging** 50 parts per tray

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



Recommended  
PCB Layout



Secondary windings to be connected in parallel on the PC board

Dimensions are in  
inches  
mm