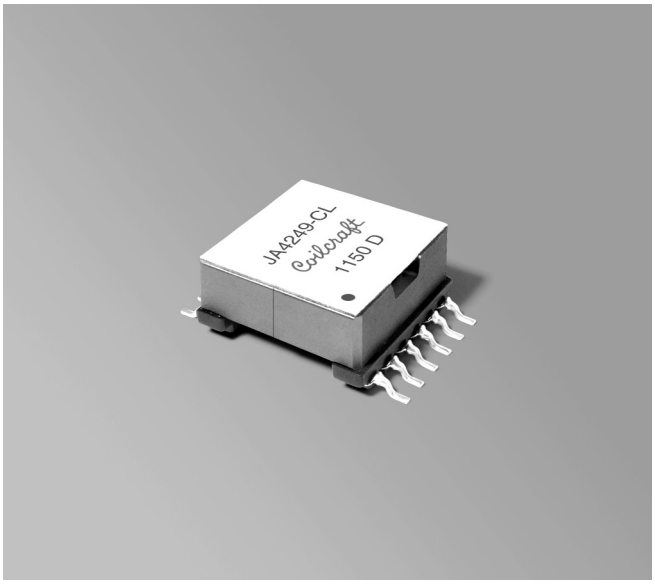
Forward Mode Transformers

For Texas Instruments TPS23756 PoE Interface



- Developed for the TI TPS23756 High Power/High Efficiency PoE Interface and DC/DC Controller.
- Designed for forward topology operating at 250 kHz with an extended input voltage range of 10 – 57 V.
- 1500 Vrms, one minute isolation, primary and bias to secondary

Core material Ferrite
Terminations RoHS tin-silver (96.5/3.5) over tin over nickel over phos bronze. Other terminations available at additional cost.
Weight 12.1 – 13.1 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)
Packaging 175 per 13″ reel Plastic tape: 44 mm wide, 0.4 mm thick, 32 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[1]	Inductance[2] min (µH)	DCR max (Ohms)[3] pri	sec	bias	Leakage inductance[4] max (µH)	Input voltage[5] range (V)	Turns ratio[6] pri : sec	pri : bias	Output[7]
JA4249-CL_	90	0.0180	0.015	0.320	0.120	10 – 57	1 : 0.80	1 : 1.9	5 V, 5 A
JA4667-AL_	90	0.0175	0.047	0.320	0.085	10 – 57	1 : 1.9	1 : 1.9	12 V, 2 A

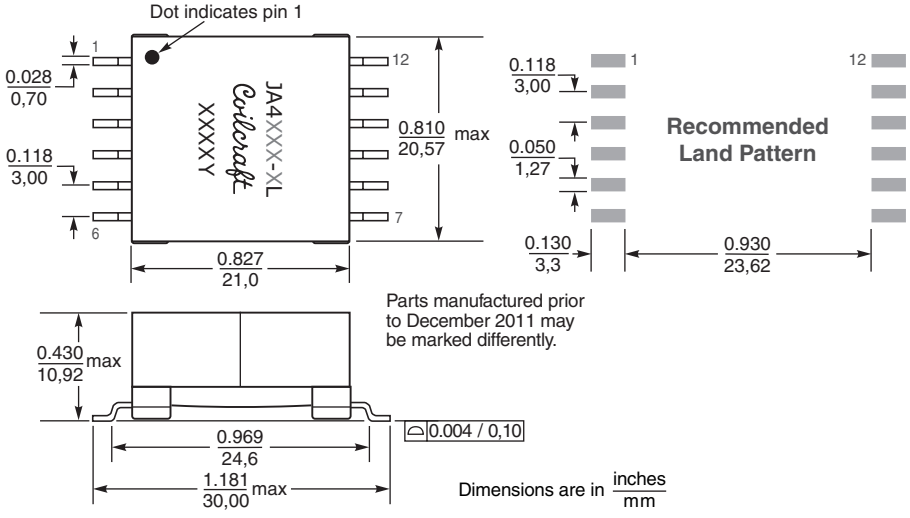
1. When ordering, please specify a **packaging** code:

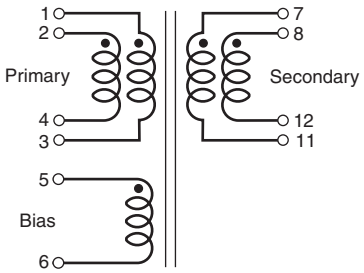
JA4667-ALD

Packaging: **D** = 13″ machine ready reel. EIA-481 embossed plastic tape (175 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer ($25 charge).
B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D.

2. Inductance is measured at 250 kHz, 0.2 Vrms, 0 Adc.
3. DCR for the secondary is measured with the windings connected in parallel.
4. Leakage inductance is for the primary and is measured with the secondary shorted.
5. Maximum duty cycle at minimum input voltage is 0.72.
6. Turns ratio is with the primary windings and secondary windings connected in parallel.
7. Output is with the secondary windings connected in parallel. Bias winding output is 12 V, 20 mA.
8. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.





Primary windings and secondary windings to be connected in parallel on PC board.

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