

Shielded Coupled Inductor

For TI's LM5160 Dual Output Fly-Buck™ Reference Design



- Published as TA7848-AE on TI's LM5160 Dual Output Non-Isolated Fly-Buck™ Reference Design, PMP10733
- Low leakage inductance and DCR; excellent current handling
- Based on the Coilcraft LPH miniature inductor series. Contact Coilcraft for other turns ratios.

Core material Ferrite

Environmental RoHS compliant, halogen free

Terminations RoHS compliant matte tin over nickel over silver. Other terminations available at additional cost.

Weight 850 mg

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)

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

Part number ¹	Turns ratio pri : sec	Inductance (µH) ²		DCR max (Ohms) ³		Leakage inductance ⁴ max (µH)	Isolation ⁵ (Vrms / Vdc)
		min	max	pri	sec		
TA7848-AE_	1 : 1.05	16.0	24.0	0.1835	0.300	0.82	1000 / 1500

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

TA7848-AED

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (250 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 C.

D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (1000 parts per full reel).

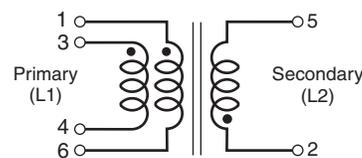
2. Inductance is for the primary, measured at 100 kHz, 0.1 Vrms, 0 Adc with the windings connected in parallel.

3. DCR for the primary is measured with the windings connected in parallel.

4. Leakage inductance is for the primary winding, measured with the secondary winding shorted.

5. Isolation (hipot) is measured from primary to secondary for one minute.

6. Electrical specifications at 25°C.

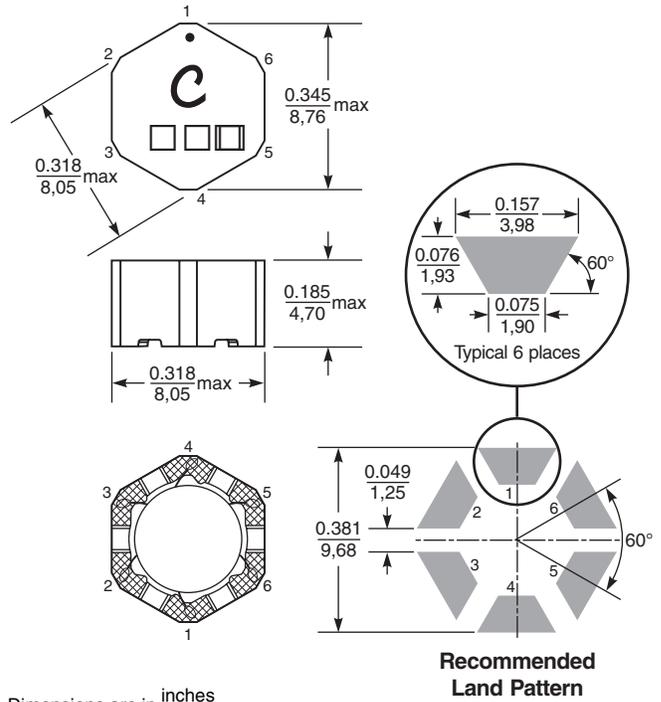
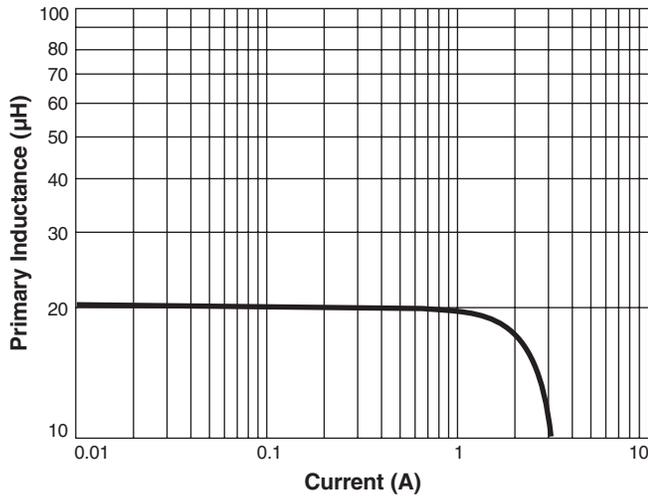


Primary windings to be connected in parallel on the PCB



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L vs Current



Dimensions are in $\frac{\text{inches}}{\text{mm}}$

Packaging 250/7" reel; 1000/13" reel; Plastic tape: 16 mm wide, 0.28 mm thick, 12 mm pocket spacing, 4.95 mm pocket depth
Recommended pick and place nozzle OD: 8 mm; ID: 4 mm