PRELIMINAR **PoE Transformers** For National Semiconductor LM5070 PoE Interface



These surface mount flyback transformers were developed specifically for the National Semiconductor LM5070 Powered Devices Interface in 13 Watt Power over Ethernet (PoE) applications.

They are designed to operate at 250 kHz with an input voltage of 36 - 72 Volts. These industry-standard size EP13 transformers feature 1500 V rms isolation from the primary and bias windings to the secondary.

Coilcraft can also custom design transformers with voltage, inductance and DCR values to meet your specific requirements.

For free evaluation samples, contact Coilcraft or order them on-line at www.coilcraft.com.

Part number	Inductance at 0 A ¹ ±10% (µH)	Inductance at Ipk ² min (µH)	DCR max (Ohms) ³			Leakage inductance	Turns ratio⁵	Ipk ²	
			pri	bias	sec	max (µH)⁴	pri : sec : bias	(Å)	Output
C1495-A	127	114.3	0.255	0.310	0.018	1.25	1:0.166:0.5	1.0	3.3 V, 4.0 A
C1585-A	127	114.3	0.222	0.348	0.039	0.950	1:0.25:0.5	1.0	5.0 V, 2.6 A
C1586-A	127	114.3	0.199	0.308	0.129	0.650	1:0.5:0.5	1.0	12 V, 1.08 A

1. Inductance measured at 250 kHz, 0.2 Vrms, 0 Adc.

2. Ipk is peak primary current drawn at minimum input voltage.

3. DCR for the secondary is per winding.

4. Leakage inductance measured between pins 3 and 4 with all other pins shorted.

5. Turns ratio is with the secondary windings connected in parallel.

6. Operating temperature range -40°C to +85°C.

7. Electrical specifications at 25°C.



Specifications subject to change without notice. Document 445 Revised 11/24/04

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469 E-mail info@coilcraft.com Web http://www.coilcraft.com