Flyback Transformer

RoHS/REACH COMPLIANT

Halogen Free

AEC Q200 +125°C
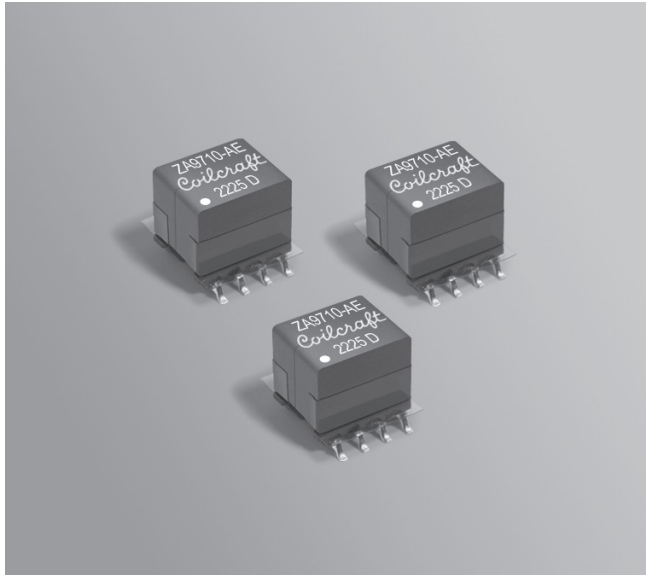
- Designed for UCC5870-Q1 IGBT/SiC isolated gate driver for Texas Instruments
- Optimized for 300 kHz with 4.5 – 70 V input
- 3000 Vrms, one minute isolation (hipot) between primary and secondary
- AEC-Q200 Grade 1 (–40°C to +125°C)

Core material Ferrite

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

Weight 2.7 g

Ambient temperature –40°C to +125°C

Max Part Temperature +165°C (ambient + temperature 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)
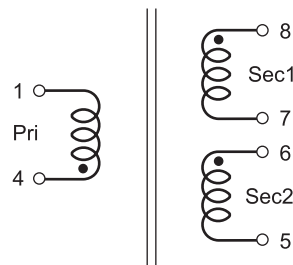
Packaging 350/13″ reel   Plastic tape: 24 mm wide, 0.50 mm thick, 16 mm pocket spacing, 10.4 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

Part number[1]	Inductance at 0 A[2] ±10% (µH)	Isat[3] (A)	DCR max (Ohms)			Leakage inductance max (µH)[4]	Turns ratio pri : sec1 : sec2	Isolation[5] (Vrms)	Power (W)	Output
			pri	sec1	sec2					
ZA9710-AED	30	3.25	0.169	0.324	0.190	0.35	1 : 1: 0.53	3000	4.6	15 V, 0.2 A (sec1) 8 V, 0.2 A (sec2)

1. **Packaging:**   **D** = 13″ machine-ready reel. EIA-481 embossed plastic tape (350 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer ($25 charge).
2. Inductance is for the primary, measured at 300 kHz, 0.1 Vrms, 0 Adc.
3. DC current that causes the primary inductance drop 30% from its value without current.
4. Leakage inductance is for the primary winding with the secondary windings shorted.
5. 3000 Vrms, one minute isolation (hipot) between windings.
6. Electrical specifications at 25°C.

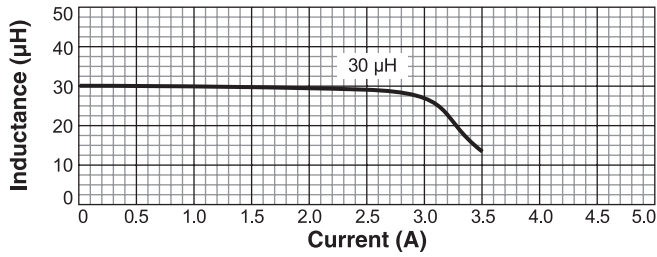Refer to Doc 362 "Soldering Surface Mount Components" before soldering.
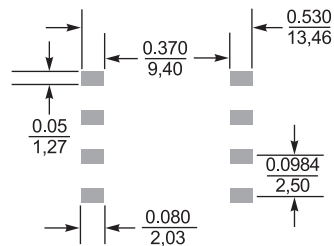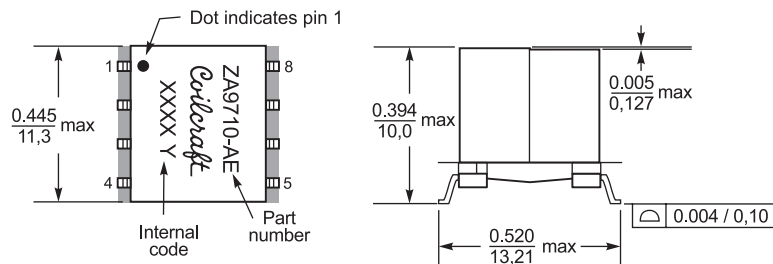
Schematic

```
1 o── Pri        8 o── Sec1
4 o──            7 o──
                 6 o── Sec2
                 5 o──
```

Flyback Transformer

L vs Current

Dimensions

Dot indicates pin 1

1 8

ZA9710-AE
Coilcraft
XXXX Y

4 5

$\frac{0.445}{11,3}$ max

Internal code

Part number

$\frac{0.394}{10,0}$ max

$\frac{0.005}{0,127}$ max

$\frac{0.520}{13,21}$ max

0.004 / 0,10

$\frac{0.530}{13,46}$

$\frac{0.370}{9,40}$

$\frac{0.05}{1,27}$

$\frac{0.0984}{2,50}$

$\frac{0.080}{2,03}$

Recommended

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