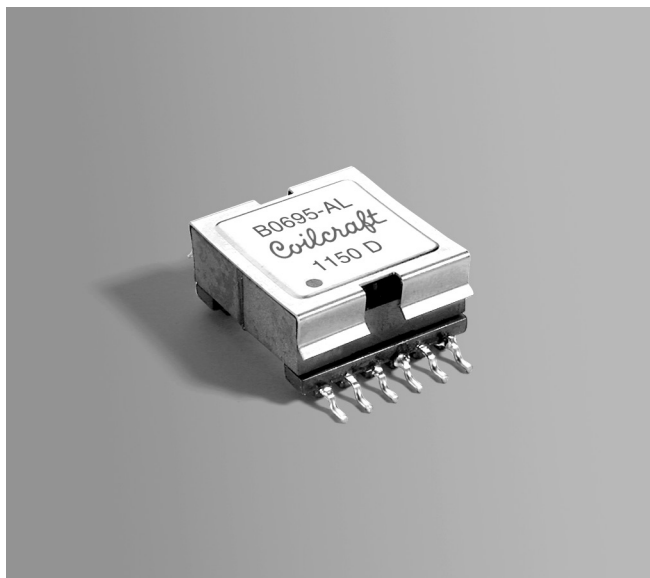**RoHS COMPLIANT**

Flyback Transformer
For National Semiconductor LM5020 PWM Controller

- Designed to operate up to 1 MHz with 36 –72 V input.
- 3.3V, 4.5A output with secondary windings connected in parallel. Bias output is 12 V.
- Ideal for 13 W, IEEE 802.3af-compliant, PoE applications.

Core material Ferrite

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

Weight 12.8 g

Ambient temperature –40°C to +85°C

Storage temperature Component: –40°C to +85°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)

Failures in Time (FIT) / Mean Time Between Failures (MTBF) 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

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]	L at 0 A[2] ±10% (µH)	L at Ipk[3] ±10% (µH)	DCR max (Ohms)[4] pri	aux	sec	Leakage L (µH)[5]	Turns ratio[6] pri : sec	pri : bias	Capacitance[7] (pF)	Ipk[3] (A)	Isolation[8] (Vrms)
B0695-AL_	110	99.0	0.133	0.656	0.019	1.11	1 : 0.23	1 : 0.69	110	1.5	1500

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

   B0695-ALD

   Packaging: **D** = 13″ machine ready reel. EIA-481 embossed plastic tape (175 per full reel).

   B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter D instead.

2. Inductance is for the primary, measured at 10 kHz, 0.1 Vrms, 0 Adc.
3. Ipk is the peak current drawn at minimum input voltage.

4. DCR for the secondary is per winding.
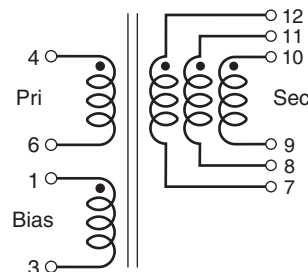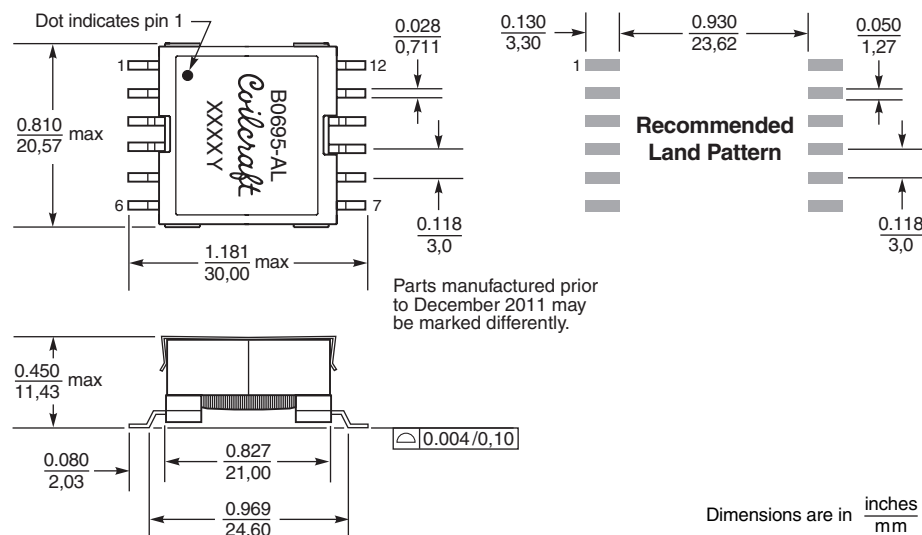5. Leakage inductance measured between pins 4 and 6 with all other pins shorted.
6. Turns ratio is with the secondary windings connected in parallel.
7. Capacitance measured between pins 3 and 4 with other pins shorted.
8. Isolation is measured from the primary and bias to the secondary.
9. Electrical specifications at 25°C.

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

Dot indicates pin 1

$\frac{0.810}{20,57}$ max $\frac{1.181}{30,00}$ max $\frac{0.028}{0,711}$ $\frac{0.118}{3,0}$

$\frac{0.450}{11,43}$ max $\frac{0.080}{2,03}$ $\frac{0.827}{21,00}$ $\frac{0.969}{24,60}$

$\frac{0.130}{3,30}$ $\frac{0.930}{23,62}$ $\frac{0.050}{1,27}$ $\frac{0.118}{3,0}$

Recommended Land Pattern

$\boxed{0.004 / 0,10}$

Parts manufactured prior to December 2011 may be marked differently.

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

Secondary windings to be connected in parallel on PC board.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Coilcraft](#):
  [B0695-ALD](#) [B0695-ALB](#)