# Flyback Transformers

Flyback transformers developed for STMicroelectronics
- Operates at 250 kHz with 30 – 60 V input
- Versions for 5 V and 3.3 V output in 20 Watt applications
- 1500 Vrms, one minute isolation primary and bias to secondary windings

**Core material** Ferrite  
**Weight** 8.4 – 8.6 g  
**Terminations** RoHS tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.  
**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 ref flows 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** 200 per 13” reel Plastic tape: 44 mm wide, 0.4 mm thick, 24 mm pocket spacing, 11.5 mm pocket depth  
**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

## Specifications

<table>
<thead>
<tr>
<th>Part number</th>
<th>L at 0 A</th>
<th>L at Ipk</th>
<th>DCR max (Ohms)</th>
<th>Leakage inductance</th>
<th>Turns ratio</th>
<th>Ipk</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA2706-BL___</td>
<td>77.8</td>
<td>70.0</td>
<td>0.155</td>
<td>6.80:1</td>
<td>4.86:1</td>
<td>3.0</td>
<td>3.3 V, 6 A</td>
</tr>
<tr>
<td>FA2707-BL___</td>
<td>77.8</td>
<td>70.0</td>
<td>0.155</td>
<td>4.25:1</td>
<td>2.43:1</td>
<td>3.0</td>
<td>5.0 V, 4 A</td>
</tr>
</tbody>
</table>

1. When ordering, please specify **packaging** code:  
   - FA2707-BLD  
     Packaging: **D** = 13” machine ready reel, EIA-481 embossed plastic tape (200 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 for the primary, measured at 250 kHz, 0.2 Vrms.  
3. Peak primary current drawn at minimum input voltage.  
4. DCR for the primary and the secondary is with windings connected in parallel.  
5. Leakage inductance is for the primary, measured with the secondary and drive windings shorted.  
6. Turns ratio is with the primary and the secondary windings connected in parallel.  
7. Output of the secondary is with the windings connected in parallel.  
   Aux winding output is 10 V, drive winding output is 5.5 V.  
8. Electrical specifications at 25°C.  
Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

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## Dimensions

![Dimensions](Doc672_Fig1.png)

- The primary and secondary windings are to be connected in parallel on the PC board.
- Dimensions are in inches / mm.

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This product may not be used in medical or high risk applications without prior Coilcraft approval.  
Specification subject to change without notice.  
Please check web site for latest information.

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