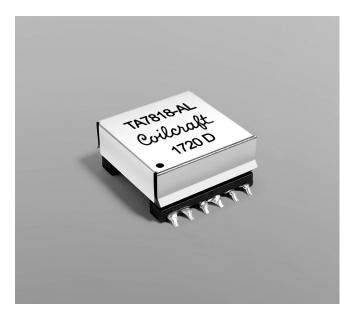


## Flyback Transformer For Microsemi PD70211 PD Controller



- Specified on the Microsemi PD70211EVB51F-12 evaluation board.
- Designed for 51 W PoE++ IEEE 802.3at-2009 applications.
- 12 V, 4.25 A output; 36–57 Volt input; operates at 250 kHz
- Auxiliary winding output: 13 V, 30 mA
- Isolation: 1500 Vrms, one minute pri to sec; 500 Vrms pri to aux; 1000 Vrms all windings to the core

## Core material Ferrite

Terminations RoHS tin-silver-copper over tin over nickel over phos bronze.

Environmental RoHS compliant, halogen free

Weight 25.4 g 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 reflows at +260°C, parts cooled to room temperature between cycles Packaging 24 per tray

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787\_PCB\_Washing.pdf.

Part	Inductance at 0 A <sup>1</sup>	Inductance at Ipk <sup>2</sup>	DCR max (Ohms)			Leakage inductance <sup>4</sup>	Turns ratio⁵		Ipk <sup>2</sup>	
number	±10% (μΗ)	min (µH)	pri <sup>3</sup>	Sec <sup>3</sup>	aux	max (µH)	pri:sec	pri:aux	(A)	Output <sup>6</sup>
TA7818-AL	24.0	22.0	0.024	0.008	0.13	0.3	1:0.5	1:0.6	5.0	12V, 4.25A

1. Inductance is for the primary, measured at 10 kHz, 0.1 Vrms, 0 Adc.

2. Peak primary current drawn at minimum input voltage.

3. DCR is with the windings connected in parallel.

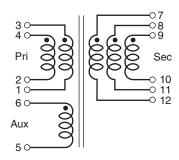
Leakage inductance is for the primary winding, measured with all other pins shorted.

Turns ratio is with primary windings connected in parallel and secondary windings connected in parallel.

6. Output is with the secondary windings connected in parallel. Output of the auxiliary winding is 13 V, 30 mA

7. Electrical specifications at 25°C.

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



The primary windings and the secondary windings to be connected in parallel on the PC board.



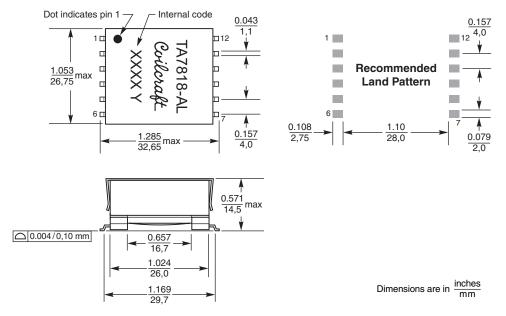
US +1-847-639-6400 sales@coilcraft.com UK +44-1236-730595 sales@coilcraft-europe.com Taiwan +886-2-2264 3646 sales@coilcraft.com.tw China +86-21-6218 8074 sales@coilcraft.com.cn Singapore + 65-6484 8412 sales@coilcraft.com.sg

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## Flyback Transformer for Microsemi PD70211





 US
 +1-847-639-6400
 sales@coilcraft.com

 UK
 +44-1236-730595
 sales@coilcraft-europe.com

 Taiwan
 +886-2-2264
 3646
 sales@coilcraft.com.tw

 China
 +86-21-6218
 8074
 sales@coilcraft.com.cn

 Singapore
 + 65-6484
 8412
 sales@coilcraft.com.sg

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