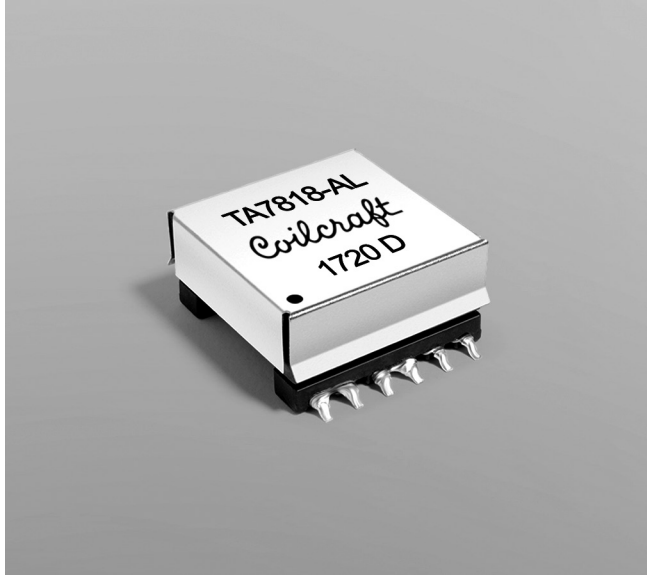




Flyback Transformer

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

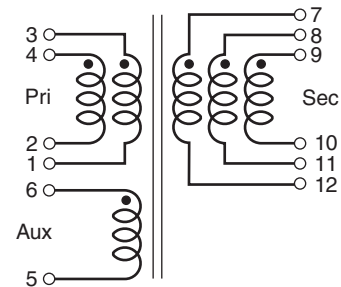
Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Packaging 24 per tray

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

Part number	Inductance at 0A ¹ ±10% (µH)	Inductance at I _{pk} ² min (µH)	DCR max (Ohms)			Leakage inductance ⁴ max (µH)	Turns ratio ⁵		I _{pk} ² (A)	Output ⁶
			pri ³	sec ³	aux		pri:sec	pri:aux		
TA7818-AL	24.0	22.0	0.024	0.008	0.13	0.3	1:0.5	1:0.6	5.0	12V, 4.25 A

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.
 4. Leakage inductance is for the primary winding, measured with all other pins shorted.
 5. 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.



Flyback Transformer for Microsemi PD70211

