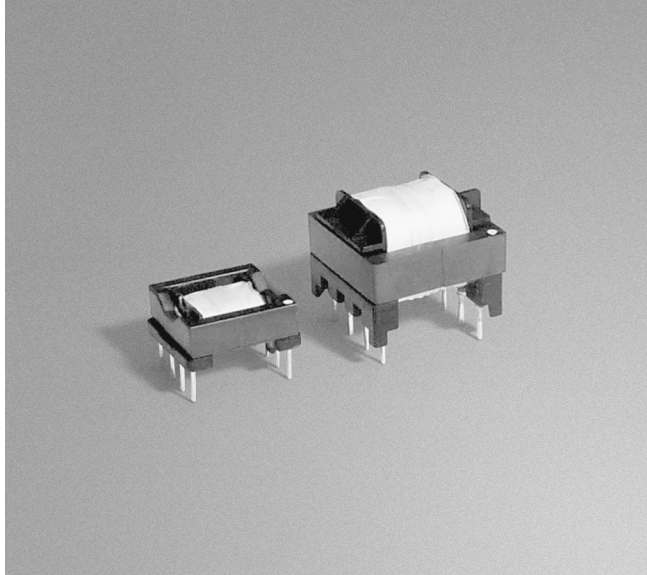




Magnetics for 300 W Power Supply with PFC



- Specified by Texas Instruments in Reference Design SLUU341 for 300 Watt Isolated PFC Power Supply
- HA3950-AL, Flyback transformer (T201) for 5 W bias supply operates with an input voltage range of 100 – 450 V.
- HA3858-AL, Gate drive transformer (T301)

Core material Ferrite

Terminations RoHS compliant tin-silver over tin over copper. Other terminations available at additional cost.

Weight HA3950-AL: 13.5 g; HA3858-AL: 4.1 g

Ambient temperature –40°C to +85°C

Storage temperature Component: –40°C to +85°C.
Tray packaging: –40°C to +80°C

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

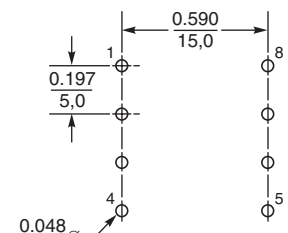
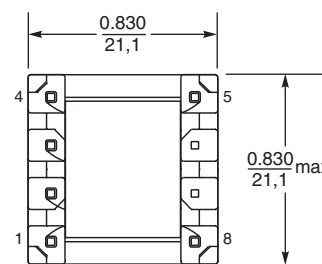
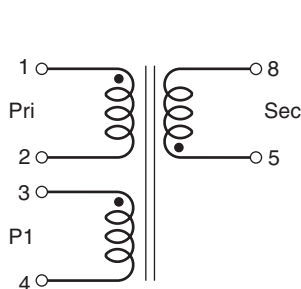
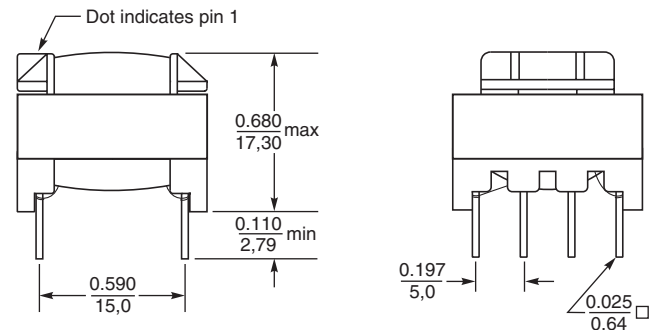
Packaging 100 per tray

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.

HA3950-AL Flyback Transformer

Part number	Inductance at 0 A ¹ ±10% (mH)	Inductance at I _{pk} ² (mH)	DCR max (Ohms)	Leakage inductance max (μH) ³	Turns ratio Pri:Sec:P1	I _{pk} ² (A)	Output ⁴
HA3950-AL	2.3	1.61	0.860 (pri) 0.109 (sec) 0.080 (P1)	16.5	1 : 0.16 : 0.11	0.3	15 V, 0.33 A

1. Inductance measured at 100 kHz, 0.1 V_{rms}, 0 Adc using an Agilent/HP 4263B impedance analyzer or equivalent.
2. Peak primary current drawn at minimum input voltage.
3. Leakage inductance is for the primary and is measured with the secondary shorted.
4. Output of the P1 winding is 10 V, 20 mA.
5. Isolation: 3000 V_{rms}, one minute primary to secondary; 500 V_{rms}, one minute windings to core
6. Electrical specifications at 25°C.



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

Recommended PC Board Layout



www.coilcraft.com

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

Document 746-1 Revised 07/23/09

© Coilcraft Inc. 2016

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.

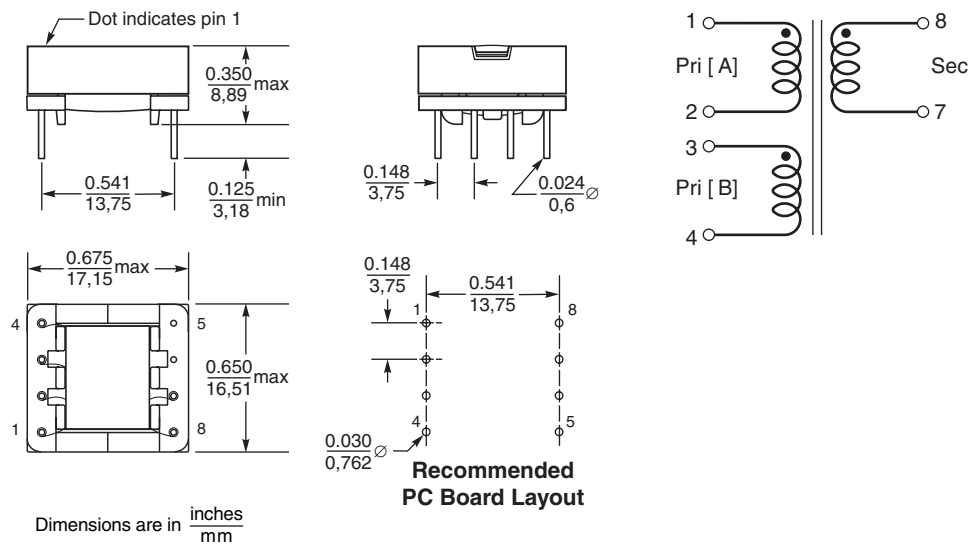


Magnetics for 300 W PFC Power Supply

HA3858-AL Gate Drive Transformer

Part number	Turns ratio	Primary inductance ¹ ±25% (µH)	Leakage inductance ² max (µH)	DCR max (Ohms)	Volt-time product (V-µsec)	SRF typ ³ (MHz)	Capacitance max (pF)
HA3858-AL	1 : 1 : 1	460	1.87 (1 – 2) 2.06 (3 – 4)	0.380 (Pri [A]) 0.472 ((Pri [B]) 0.424 (sec)	150	1.15	8.48 (pri) 28.66 (sec)

- Inductance is for each winding, measured at 200 kHz, 0.4 Vrms, 0 Adc.
- Leakage inductance is for each primary, measured at 200 kHz, 0.4 Vrms with secondary pins shorted.
- SRF measured with coils connected in series using an Agilent/HP 4192 or equivalent.
- Operating temperature range –40°C to +85°C.
- Isolation: 3000 Vrms, one minute primary to secondary; 500 Vrms, one minute windings to core
- Electrical specifications at 25°C.



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Audio Transformers / Signal Transformers](#) category:

Click to view products by [Coilcraft](#) manufacturer:

Other Similar products are found below :

[CX2041NLT](#) [MGPWT-00449-P](#) [PE-64961](#) [H1302FNLT](#) [H5008FNL](#) [H5012FNL](#) [H5020FNLT](#) [H5077NLT](#) [H5079NLT](#) [H5084FNLT](#)
[B78476A9558A003](#) [1812WBT2-4](#) [1879479-1](#) [HX2260FNL](#) [HX5014FNL](#) [EX2024FNL](#) [FL1066](#) [T1137NLT](#) [T3012NL](#) [PE-65812FNL](#) [PE-65848FNLT](#) [H1174FNL](#) [H1302FNL](#) [H5015FNL](#) [H5019EFNL](#) [H5062FNLT](#) [CX2047LNL](#) [MGPWT-00059-P](#) [MGPWT-00266-P](#) [MGPWT-00278-P](#) [MGPWT-00431-P](#) [TTC-100](#) [TTC-143-H](#) [TTC-5032-1](#) [BX1194WNLT](#) [HX1234NLT](#) [HX5008FNLT](#) [HX5019FNL](#) [HX5084NL](#) [3-1879385-5](#) [TX1263NLT](#) [4-1879391-0](#) [T1142NL](#) [HX6101FNL](#) [HX5084FNL](#) [HX1148NL](#) [HX5020FNLT](#) [HX5014FNLT](#) [T1124NL](#)
[1879732-1](#)