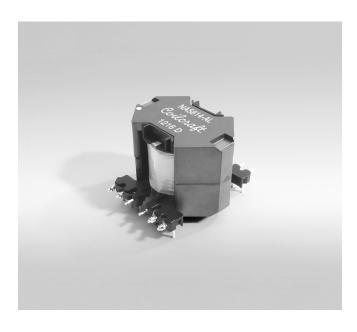




Flyback Transformer For Microchip AN1444 Microinverter



- Developed for the Microchip AN1444 Grid-Connected Solar Microinverter
- Designed to operate at 57 kHz with 20 55 Vdc input
- Rectified sine wave output
- Maximum power: 100 W
- 3000 Vrms, one minute isolation primary to secondary
- 1500 Vrms, one minute isolation windings to core

Core material Ferrite

Terminations RoHS tin-silver-copper over tin over copper-clad steel. Weight 90 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 $<30^{\circ}C$ / 85% relative humidity)

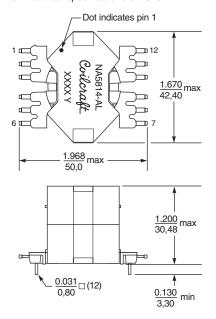
Failures in Time (FIT) / Mean Time Between Failures (MTBF) 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

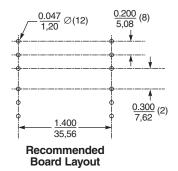
Packaging 20 parts per tray

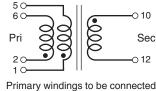
PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf

Part	L at 0 A1	L at Ipk ²	DCR max (Ohms)3		Leakage L ⁴	Turns ratio	Ipk ²	Output
number	±10% (μH)	min (μH)	pri	sec	max (μH)	pri : sec	(A)	(Vrms)
NA5814-AL	55.0	44.0	0.0475	0.360	1.45	1:7	13.6	230
NA5919-AL	55.0	38.5	0.0480	0.110	1.58	1:4	13.6	110

- 1. Inductance is for the primary, measured at 150 kHz, 1.0 Vrms, 0 Adc.
- 2. Ipk is the peak current drawn at minimum input voltage.
- 3. DCR for the primary is with windings connected in parallel
- 4. Leakage inductance measured on the primary winding with the secondary pins shorted.
- 5. Ambient operating temperature range -40°C to +85°C.
- 6. Electrical specifications at 25°C.







in parallel on the PC board.

Dimensions are in inches



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