

Power Inductor – GA3199-AL For ON Semiconductor NCP1654 PFC Controller



- Designed for ON Semiconductor for their 300 Watt, wide mains, PFC stage, driven by the NCP1654 PFC Controller
- Shown as L1 on Application Note AND8324/D
- High inductance: 650 µH; high saturating current: 6.3 A

Core material Ferrite

Terminations RoHS compliant tin-silver (96.5/3.5) over tin over nickel over phos bronze. Other terminations available at additional cost. Weight 94 g

Ambient temperature -40°C to +85°C with (40°C rise) Irms current.

Maximum part temperature +125°C (ambient + temp rise)

Storage temperature Component: -40°C to +125°C. Tray packaging: -40°C to +80°C

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Mean Time Between Failures (MTBF) / Failures in Time (FIT) 26,315,789 hours / 38 per billion hours, Calculated per Telcordia SR-322 Packaging 20 per tray

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

Part number	Inductance ¹ ±10% (µH)	DCR max (Ohm)	SRF typ ² (kHz)	Isat (A) ³			Irms (A) ⁴	
				10% drop	20% drop	30% drop	20°C rise	40°C rise
GA3199-AL	650	0.165	770	5.8	6.1	6.3	2.9	3.8

1. Inductance measured at 10 kHz, 0.1 Vrms, 0 Adc.

2. SRF measured on an Agilent/ HP 4192A impedance analyzer or equivalent

3. DC current at 25°C that causes the specified inductance drop from its value without current.

4. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.

5. Electrical specifications at 25°C.

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



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Inductance vs Current



- Dot provided for orientation 712 Coilcraf XXXX A3199-A 1.670 max 42.40 5 1.791 45,50 max



Parts manufactured prior to December 2011 may be marked differently.



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



removed during manufacture

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Inductance vs Frequency



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