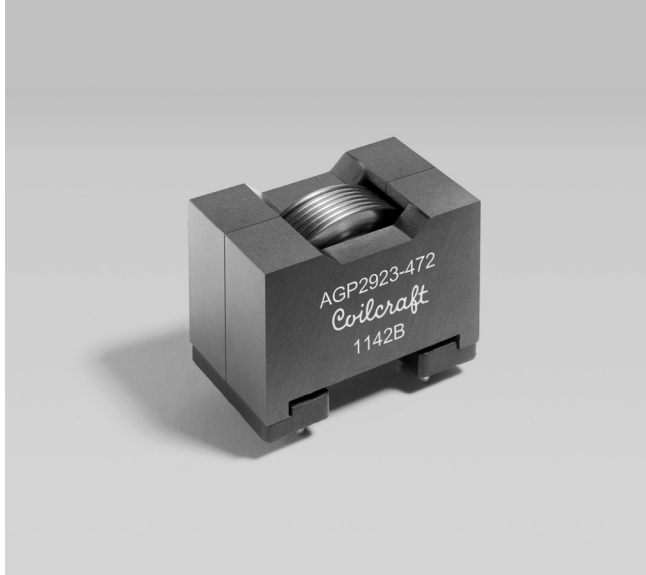


**HIGH TEMPERATURE**

# TH Power Inductors – AGP2923



- AEC-Q200 Grade 1 qualified
- Ideal for a variety of automotive applications
- Designed for high temperature environments – up to 140°C ambient
- Developed for high current power supply applications with high saturation current requirements
- Through-hole vertical mounting allows for a small footprint
- Four additional mounting pins provides stability and excellent board adhesion in high-vibration environments
- Flat wire windings for extremely low DC and AC resistance

Part number	Inductance <sup>1</sup> ±10% (µH)	DCR (mOhms) <sup>2</sup>		SRF typ <sup>3</sup> (MHz)	Isat (A) <sup>4</sup>			Irms (A) <sup>5</sup>	
		nom	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
AGP2923-332KL	3.3	2.3	2.6	40	95	104	108	19	26
AGP2923-472KL	4.7	2.3	2.6	30	63	69	72	19	26
AGP2923-682KL	6.8	2.3	2.6	25	48	53	56	19	26
AGP2923-103KL	10	2.3	2.6	20	30	34	37	19	26
AGP2923-153KL	15	2.3	2.6	16	20.5	23	24.5	19	26
AGP2923-223KL	22	2.3	2.6	13	12.2	14.7	16.4	19	26
AGP2923-333KL	33	2.3	2.6	10	7.5	9.2	10.3	19	26

1. Inductance tested at 300 kHz, 0.1 Vrms on Agilent/HP 4192A.
2. DCR measured on a Keithley 580 micro-ohmmeter or equivalent.
3. SRF measured on an Agilent/HP 4395A network analyzer and an Agilent/HP 16093B test fixture.
4. DC current at 25°C that causes the specified inductance drop from its value without current. [Click for temperature derating information.](#)
5. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings. [Click for temperature derating information.](#) When Irms is greater than Isat, Isat is the more critical specification and Irms is shown in gray type.
6. Electrical specifications at 25°C.  
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

**Core material** Ferrite**Core and winding loss** See [www.coilcraft.com/coreloss](http://www.coilcraft.com/coreloss)**Terminations****Electrical terminations:** RoHS compliant tin-silver over copper**Mounting pins:** Matte tin over copper over steel**Weight** 37 g**Ambient temperature** –40°C to +140°C with Irms current**Maximum part temperature** +180°C (ambient + temp rise). [Derating.](#)**Storage temperature** Component: –40°C to +180°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** 25 parts per tray**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).[www.coilcraft.com](http://www.coilcraft.com)

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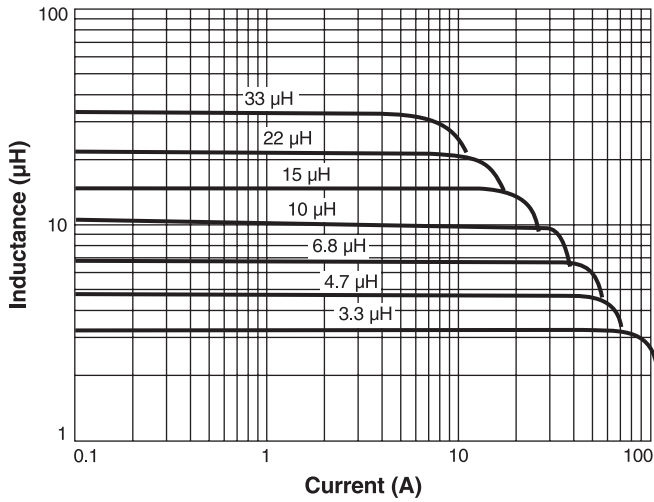
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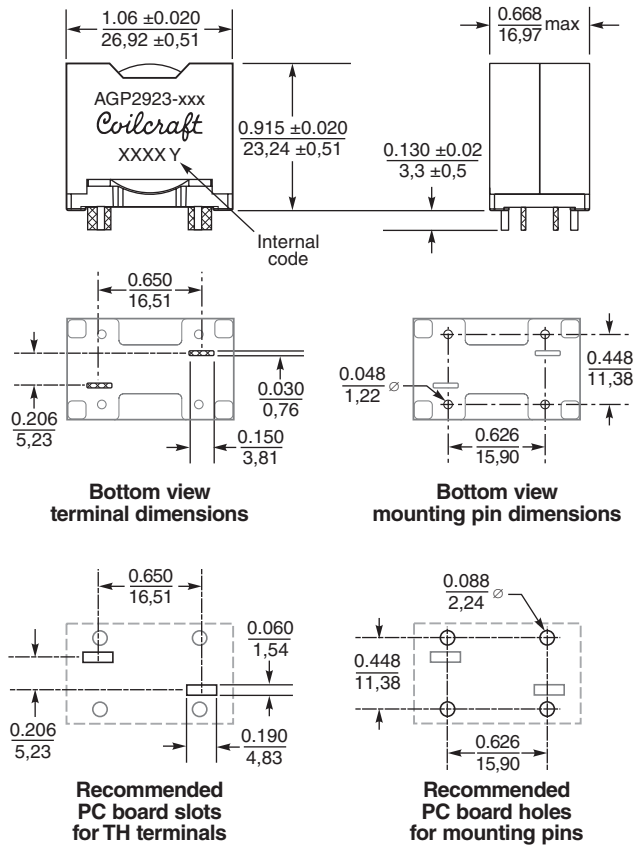
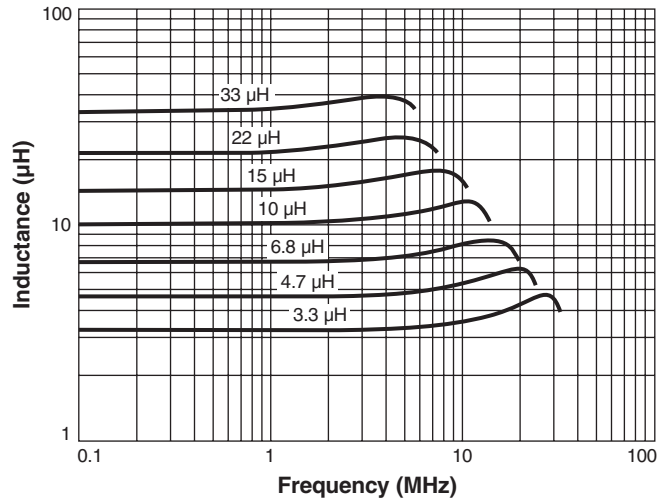
# HIGH TEMPERATURE

## Through Hole Power Inductors – AGP2923 Series

### L vs Current



### L vs Frequency



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



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