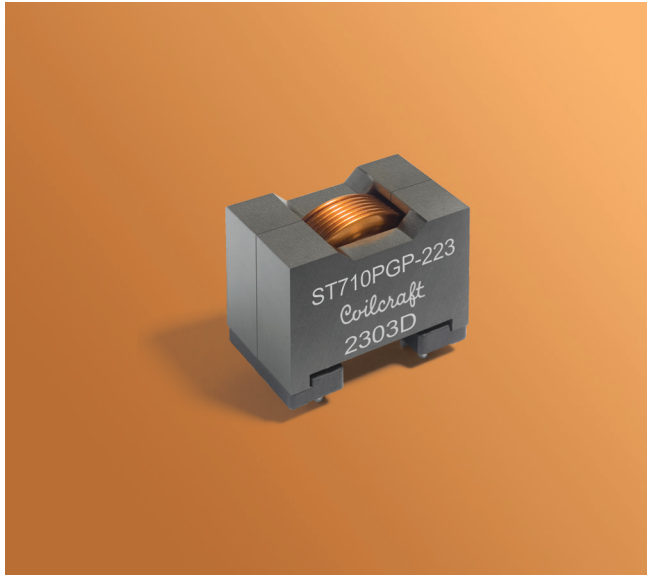


Power Inductor for Critical Applications ST710PGP



- Designed for high temperature environments – up to 140°C ambient
- Developed for high current power supply applications with high saturation current requirements
- 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 ¹	Inductance ² ±10% (μH)	DCR (mOhms) ³		SRF typ ⁴ (MHz)	Isat (A) ⁵			Irms (A) ⁶	
		nom	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
ST710PGP332KL	3.3	2.3	2.6	40	95	104	108	19	26
ST710PGP472KL	4.7	2.3	2.6	30	63	69	72	19	26
ST710PGP682KL	6.8	2.3	2.6	25	48	53	56	19	26
ST710PGP103KL	10	2.3	2.6	20	30	34	37	19	26
ST710PGP153KL	15	2.3	2.6	16	20.5	23	24.5	19	26
ST710PGP223KL	22	2.3	2.6	13	12.2	14.7	16.4	19	26
ST710PGP333KL	33	2.3	2.6	10	7.5	9.2	10.3	19	26

1. When ordering, please specify **screening** code:

ST710PGP333KLZ

Screening: Z = Unscreened

Y = Unscreened (SLDC Option A)

W = Unscreened (SLDC Option B)

H = Coilcraft CP-SA-10001 Group A

G = Coilcraft CP-SA-10001 Group A (SLDC Option A)

D = Coilcraft CP-SA-10001 Group A (SLDC Option B)

- Screening performed to the document's latest revision.
- Custom testing also available.

2. Inductance tested at 300 kHz, 0.1 Vrms on Agilent/HP 4192A.

3. DCR measured on a Keithley 580 micro-ohmmeter or equivalent.

4. SRF measured on an Agilent/HP 4395A network analyzer and an Agilent/HP 16093B test fixture.

5. DC current at 25°C that causes the specified inductance drop from its value without current. [Click for temperature derating information.](#)

6. 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.

7. 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

Terminations

Electrical terminations: 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: -55°C to +180°C.

Tray packaging: -55°C to +80°C

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

Packaging 25 parts per tray

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

Coilcraft CPS
CRITICAL PRODUCTS & SERVICES

1102 Silver Lake Road
Cary, IL 60013
Phone 800-981-0363

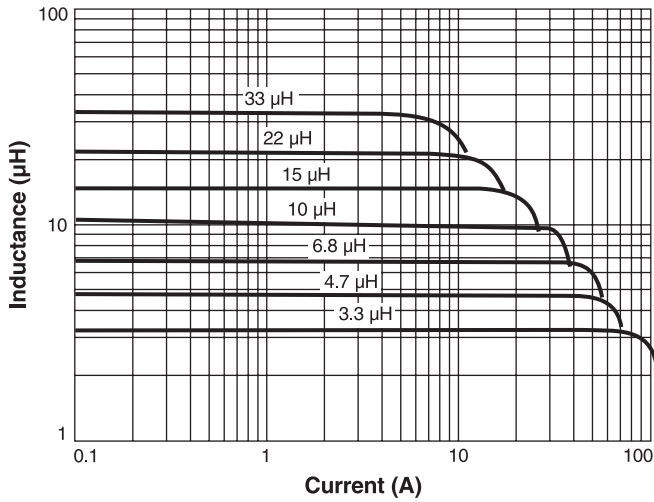
Fax 847-639-1508
Email cps@coilcraft.com
www.coilcraft-cps.com

Document ST932-1 Revised 01/27/23

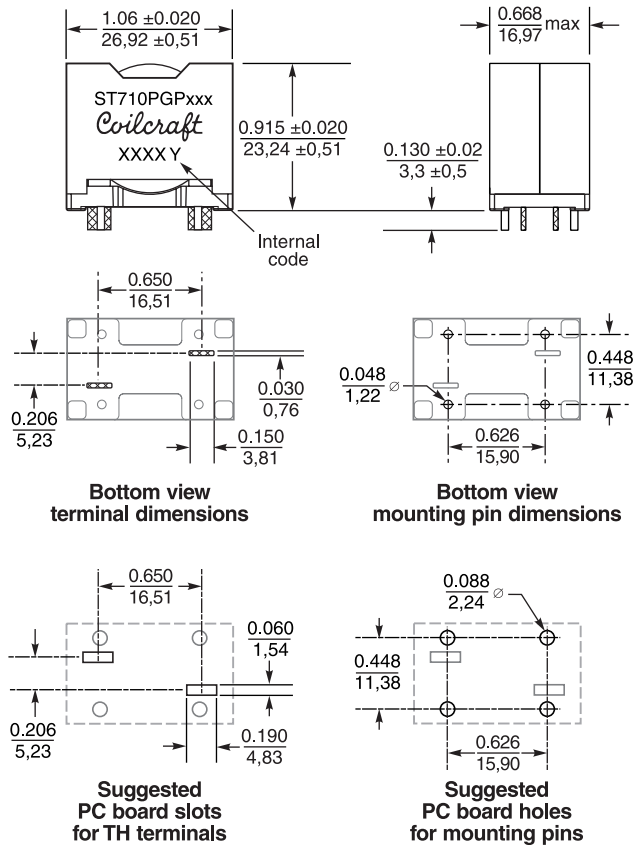
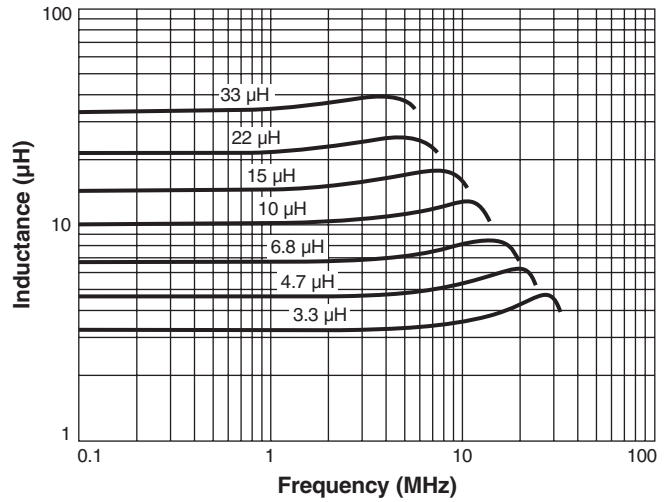
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specifications subject to change without notice. Please check our web site for latest information.

Through Hole Power Inductors – ST710PGP Series

L vs Current



L vs Frequency



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



CRITICAL PRODUCTS & SERVICES

© Coilcraft, Inc. 2023

1102 Silver Lake Road
Cary, IL 60013
Phone 800-981-0363

Fax 847-639-1508
Email cps@coilcraft.com
www.coilcraft-cps.com

Document ST932-2 Revised 01/27/23

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specifications subject to change without notice. Please check our web site for latest information.