

TH Power Inductors – AGP4233



- AEC-Q200 Grade 1 qualified (–40°C to +125°C ambient)
- High current, high inductance power inductors designed for high current power supply applications
- Flat wire windings provide extremely low DC and AC resistance.
- Through-hole mounting for excellent board adhesion
- Cover has solderable tabs for additional mounting stability.

Core material Ferrite

Core and winding loss See www.coilcraft.com/coreloss

Environmental RoHS compliant, halogen free

Terminations RoHS compliant tin-silver over copper

Shield tabs RoHS compliant bright tin over nickel over stainless steel

Weight 135 g

Ambient temperature –40°C to +125°C with Irms current, +125°C to +165°C with derated current

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 9 parts 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 ±20% (µH)	DCR (mOhms) ²		SRF typ (MHz)	Isat (A) ³			Irms (A) ⁴	
		nom	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
AGP4233-332ME	3.3	0.67	0.75	27.7	92.0	95.0	98.0	34	44
AGP4233-562ME	5.6	0.67	0.75	22.8	63.0	65.0	67.0	34	44
AGP4233-682ME	6.8	2.80	2.95	21.7	92.0	97.8	101.8	24	34
AGP4233-103ME	10	2.80	2.95	18.8	56.0	60.0	63.0	24	34
AGP4233-153ME	15	2.80	2.95	15.2	45.0	47.0	49.0	24	34
AGP4233-223ME	22	2.80	2.95	12.0	32.8	35.4	36.6	24	34
AGP4233-333ME	33	2.80	2.95	10.0	22.5	24.7	25.8	24	34
AGP4233-473ME	47	2.80	2.95	8.5	16.0	17.6	18.6	24	34
AGP4233-683ME	68	2.80	2.95	6.4	10.6	12.2	13.0	24	34
AGP4233-104ME	100	2.80	2.95	5.2	6.88	7.80	8.36	24	34
AGP4233-154ME	150	2.80	2.95	4.2	4.18	4.96	5.40	24	34
AGP4233-224ME	220	10.9	11.55	5.0	6.40	7.20	7.60	12.4	17.5
AGP4233-334ME	330	10.9	11.55	4.1	4.60	5.20	5.60	12.4	17.5
AGP4233-474ME	470	10.9	11.55	3.6	3.00	3.60	3.80	12.4	17.5

1. Inductance tested at 100 kHz, 0.1 Vrms on Agilent/HP 4192A.
 2. DCR measured on a Keithley 580 micro-ohmmeter or equivalent.
 3. DC current at which the inductance drops the specified amount from its value without current.
[Click for temperature derating information.](#)
 4. Current that causes the specified temperature rise of the winding from 25°C ambient.
This information is for reference only and does not represent absolute maximum ratings.
[Click for temperature derating information](#)
Temperature rise of the core is usually less than that of the winding.
When Irms is greater than Isat, Isat is the more critical specification and Irms is shown in gray type.
 5. Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



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 917-1 Revised 07/08/20

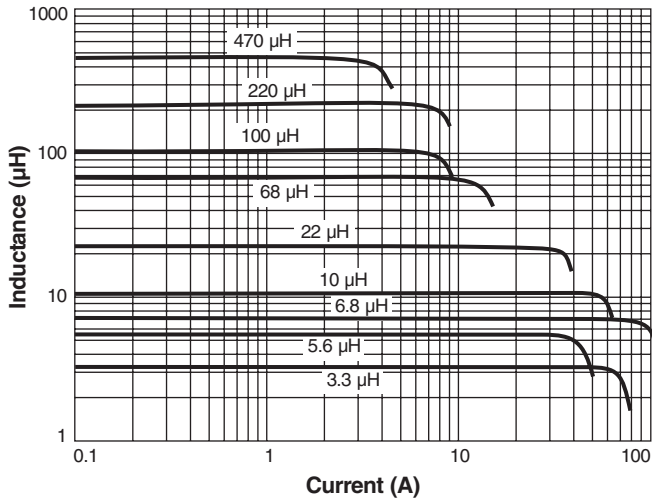
© Coilcraft Inc. 2020

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.

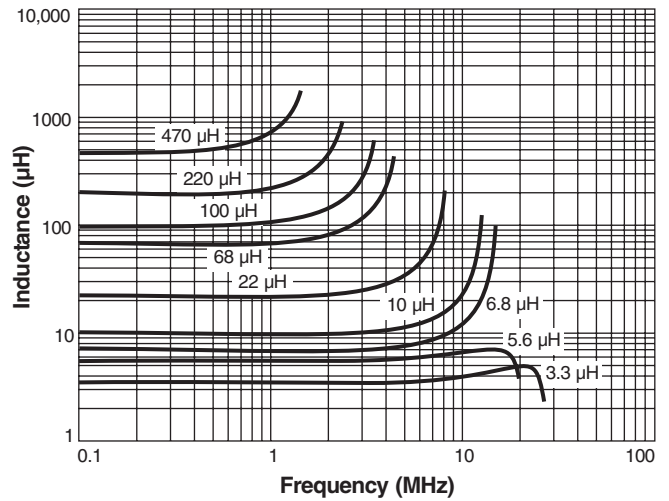


TH Power Inductors - AGP4233 Series

Typical L vs Current



Typical L vs Frequency



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 917-2 Revised 07/08/20

© Coilcraft Inc. 2020

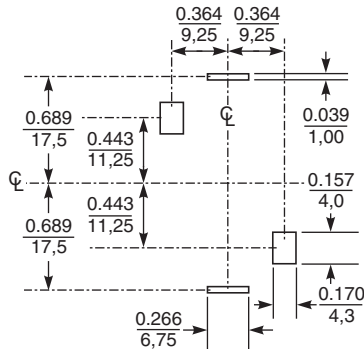
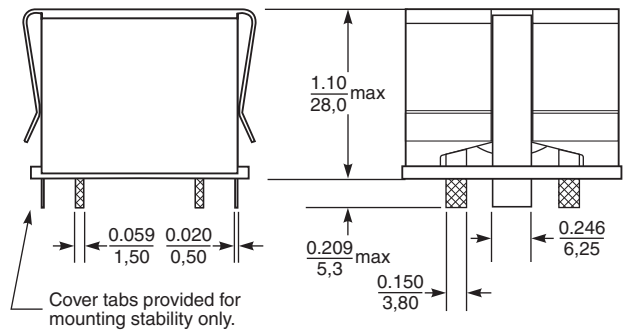
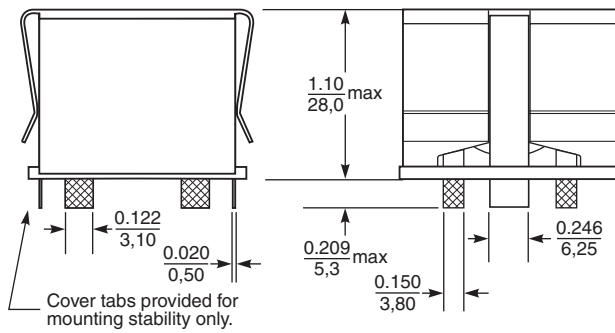
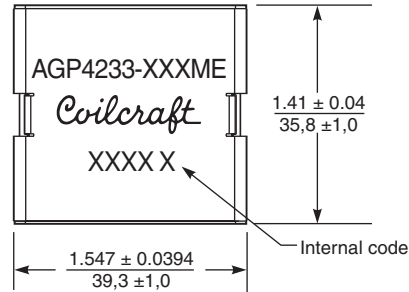
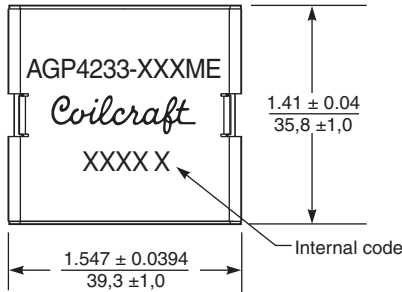
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.



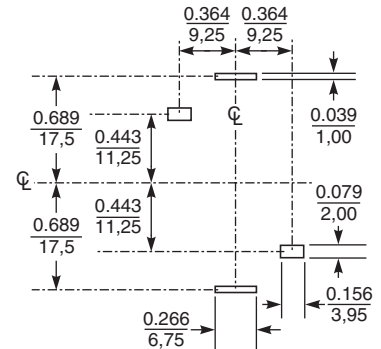
TH Power Inductors - AGP4233 Series

3.3 - 5.6 μ H

6.8 - 150 μ H



Recommended PC board slot layout



Recommended PC board slot layout

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

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



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 917-3 Revised 07/08/20

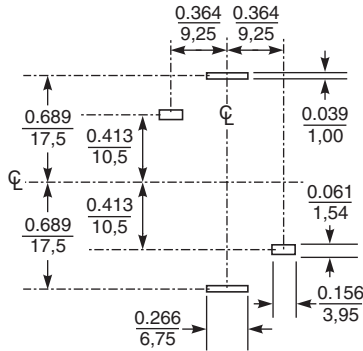
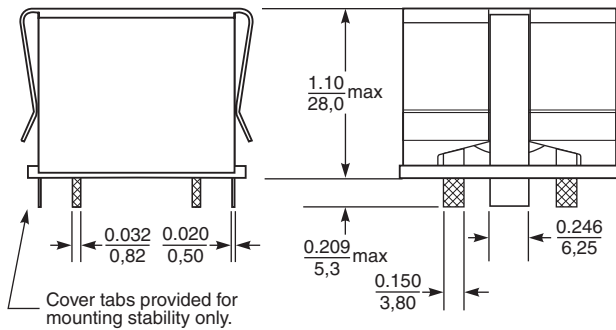
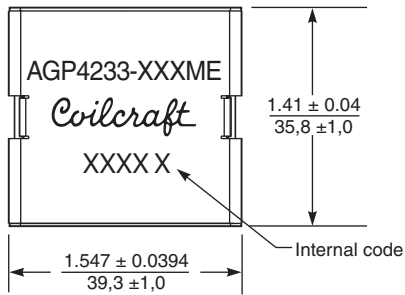
© Coilcraft Inc. 2020

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.



TH Power Inductors - AGP4233 Series

220 - 470 μ H



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

Recommended PC board slot 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 917-4 Revised 07/08/20

© Coilcraft Inc. 2020

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.