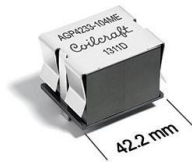


AGP4233-682ME Datasheet

www.digi-electronics.com



DiGi Electronics Part Number AGP4233-682ME-DG

Manufacturer [Coilcraft](#)

Manufacturer Product Number AGP4233-682ME

Description FIXED IND 6.8UH 34A 2.95MOHM SM

Detailed Description 6.8 μ H Shielded Wirewound Inductor 34 A 2.95mOhm Max Nonstandard

<https://www.DiGi-Electronics.com>



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

AGP4233-682ME

Series:

AGP4233

Type:

Wirewound

Inductance:

6.8 μ H

Current Rating (Amps):

34 A

Shielding:

Shielded

Q @ Freq:

-

Ratings:

AEC-Q200

Inductance Frequency - Test:

100 kHz

Mounting Type:

Through Hole

Supplier Device Package:

-

Height - Seated (Max):

1.102" (28.00mm)

Manufacturer:

Coilcraft

Product Status:

Active

Material - Core:

Ferrite

Tolerance:

\pm 20%

Current - Saturation (Isat):

92A

DC Resistance (DCR):

2.95mOhm Max

Frequency - Self Resonant:

21.7MHz

Operating Temperature:

-40°C ~ 125°C

Features:

-

Package / Case:

Nonstandard

Size / Dimension:

1.547" L x 1.409" W (39.30mm x 35.80mm)

Environmental & Export classification

ECCN:

EAR99

HTSUS:

8504.50.8000

TH Power Inductors – AGP4233



- AEC-Q200 Grade 1 (–40°C to +125°C)
- 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

Max part temperature +165°C (ambient + temp rise)

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

Storage temperature Component: –40°C to +165°C.

Tray packaging: –40°C to +80°C

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

Packaging 9 parts per tray

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

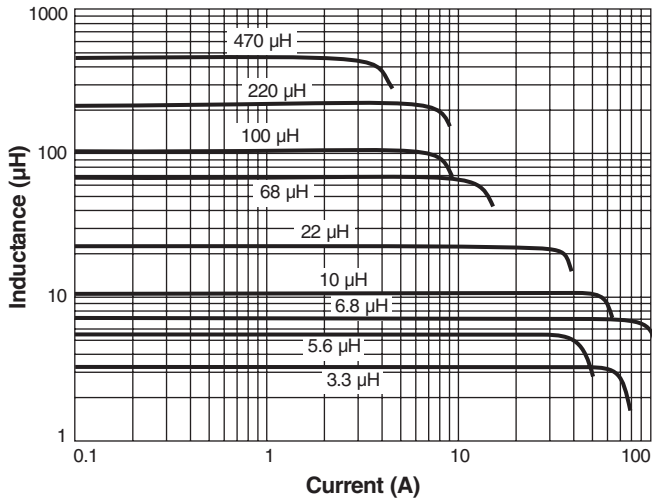
| Part number | Inductance ¹ ±20% (µH) | DCR (mOhms) ² | | SRF typ (MHz) | Isat (A) ³ | | | Irms (A) ⁴ | |
|---------------|--------------------------------------|--------------------------|-------|------------------|-----------------------|----------|----------|-----------------------|-----------|
| | | 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.

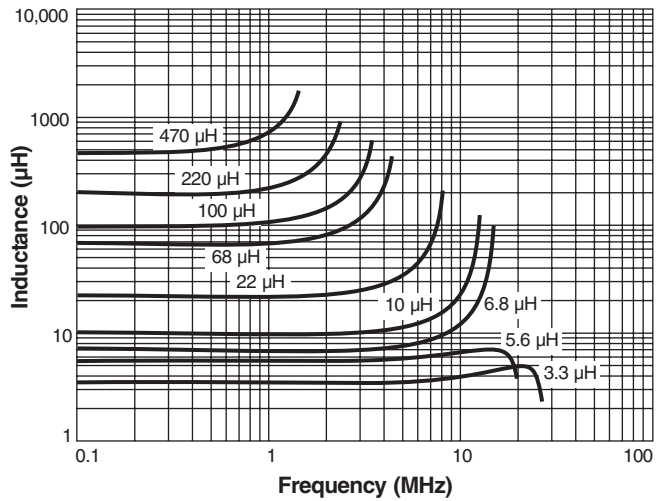


TH Power Inductors - AGP4233 Series

Typical L vs Current



Typical L vs Frequency



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 917-2 Revised 11/16/22

© Coilcraft Inc. 2022

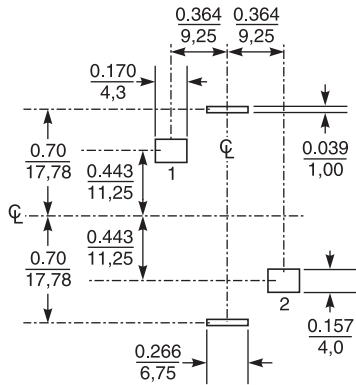
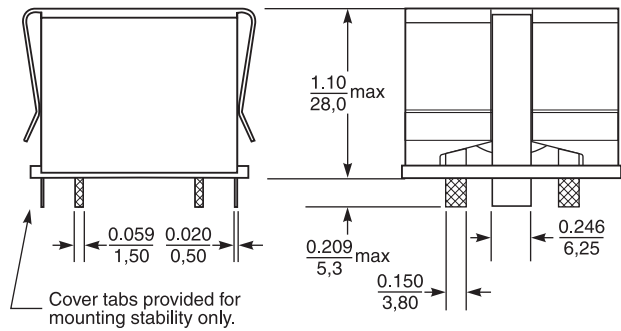
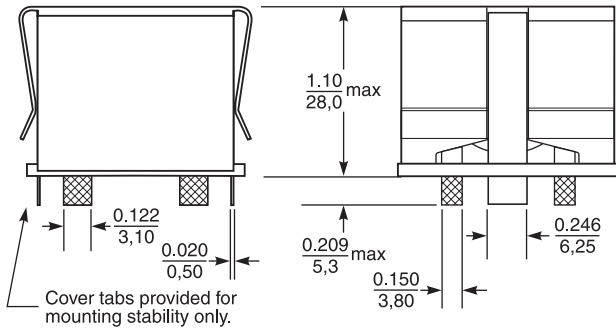
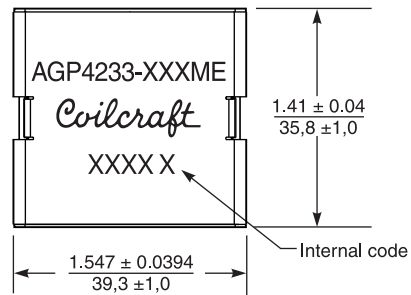
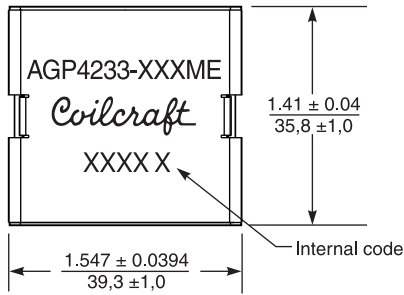
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.



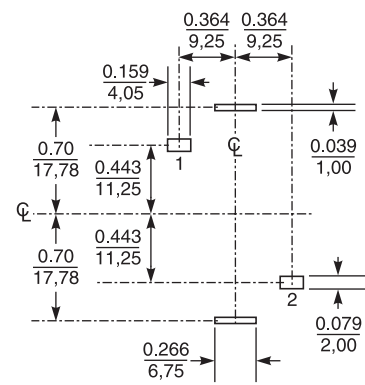
TH Power Inductors - AGP4233 Series

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 11/16/22

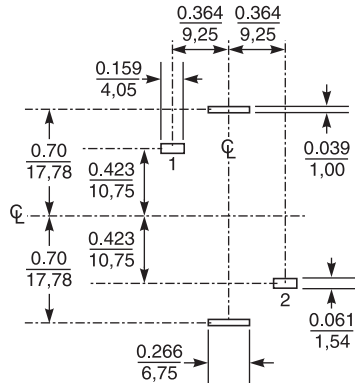
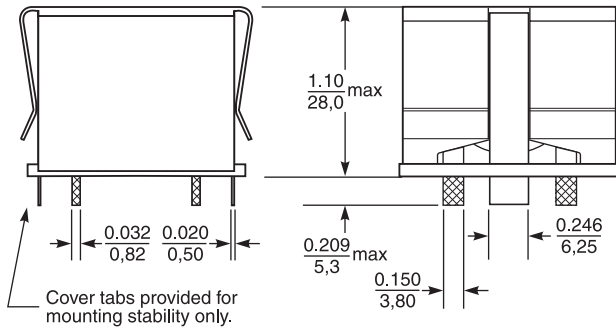
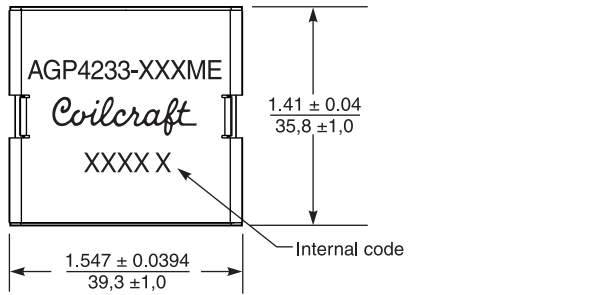
© Coilcraft Inc. 2022

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



Recommended PC board slot layout

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



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 11/16/22

© Coilcraft Inc. 2022

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.

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricly control the quality of products and services. Welcome your RFQ to

Email: Info@DiGi-Electronics.com



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.