

# Power Filter Inductors

For TI TAS5612/5614  
Class D Amplifiers



Low distortion chokes used in Texas Instrument's TPA3251D2 PurePath Ultra-HD, TAS5612/14PHD2EVM, TAS5612PHD and TAS5614PHD evaluation modules.

Request free evaluation samples by contacting Coilcraft or visiting [www.coilcraft.com](http://www.coilcraft.com).

**Core material** Powdered iron

**Environmental** RoHS compliant, halogen free

**Terminations** RoHS compliant tin-silver (96.5/3.5) over copper

**Weight** MA5172-AE: 18.7 g; MA5173-AE: 17.6 g; PA6331-AE: 21.2 g

**Ambient temperature** -40°C to +125°C with (40°C rise) Irms current.

**Maximum part temperature** +165°C (ambient + temp rise).

**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)

**Failures in Time (FIT) / Mean Time Between Failures (MTBF)**

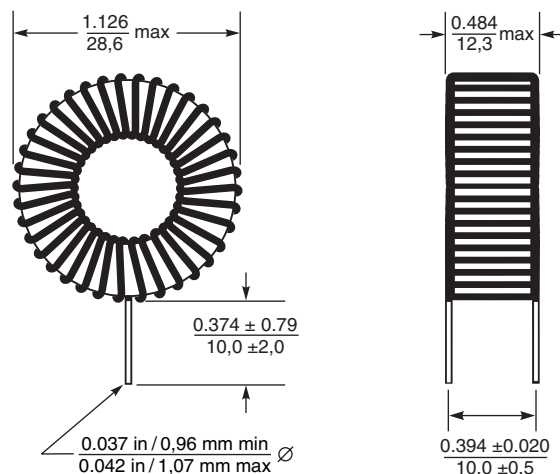
38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

**Packaging** 25 per tray

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787 PCB Washing.pdf](#).

Part number	Inductance $\pm 1 \mu\text{H}^1$ ( $\mu\text{H}$ )	DCR max (mOhms)	SRF min (MHz)	Isat <sup>2</sup> (A)	Irms (A) <sup>3</sup>	
					20°C rise	40°C rise
PA6331-AE	15	31.0	12.4	20	9.8	14.2
MA5172-AE	10	26.0	25.5	45	6.1	8.2
MA5173-AE	7	21.5	32.8	54	6.5	9.0

1. Inductance measured at 10 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4132 impedance analyzer or equivalent.
2. DC current at 25°C that causes an inductance drop of 10% (typ) from its value without current.
3. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
4. Electrical specifications at 25°C.



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



[www.coilcraft.com](http://www.coilcraft.com)

**US** +1-847-639-6400 [sales@coilcraft.com](mailto:sales@coilcraft.com)

**UK** +44-1236-730595 [sales@coilcraft-europe.com](mailto:sales@coilcraft-europe.com)

**Taiwan** +886-2-2264 3646 [sales@coilcraft.com.tw](mailto:sales@coilcraft.com.tw)

**China** +86-21-6218 8074 [sales@coilcraft.com.cn](mailto:sales@coilcraft.com.cn)

**Singapore** + 65-6484 8412 [sales@coilcraft.com.sg](mailto:sales@coilcraft.com.sg)

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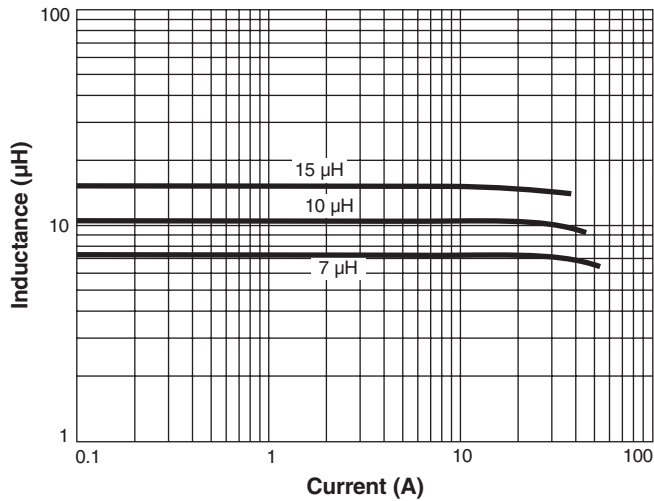
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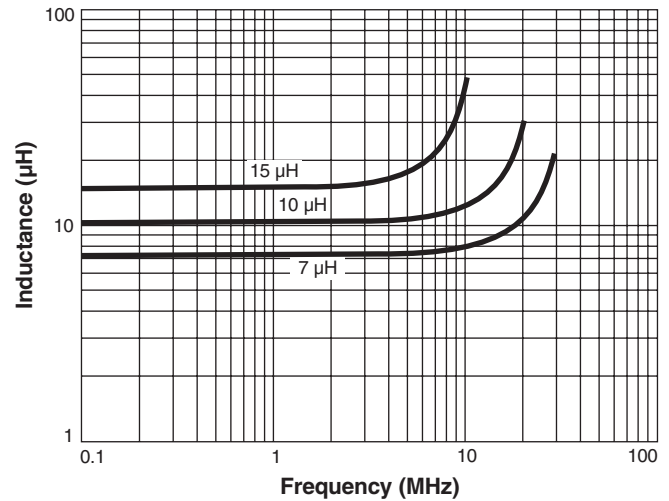


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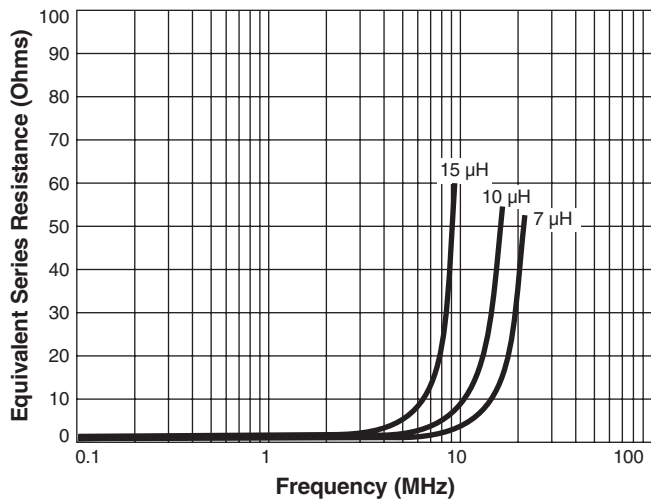
## L vs Current



## L vs Frequency



## ESR 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

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