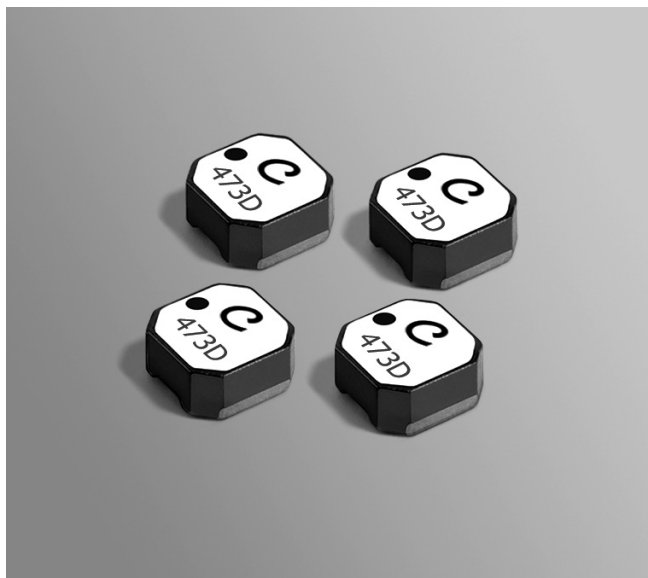


Shielded Power Inductor

For Analog Devices AD5758BCPZ
Digital-to-analog converter (DAC)



- Designed for Analog Devices AD5758BCPZ single-channel, voltage and current output digital-to-analog converter (DAC) with Dynamic Power Control (DPC)
- AEC-200 Grade 3 qualified (−40°C to +85°C ambient)
- 4.0 × 4.0 mm footprint; less than 1.8 mm tall

Core material Ferrite

Environmental RoHS compliant, halogen free

Terminations Matte tin over nickel over silver.

Weight 54 – 100 mg

Ambient temperature −40°C to +85°C with Irms current up to +125°C, at 50 mA continuous current or 200 mA for short durations

Maximum part temperature +125°C (ambient + temp rise). [Derating](#).

Storage temperature Component: −40°C to +125°C.

Tape and reel packaging: −40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

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

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

| Part number ¹ | Inductance ² ±20% (μH) | DCR max ³ (Ohms) | SRF typ ⁴ (MHz) | Isat (A) ⁵ | | | Irms (A) ⁶ | |
|--------------------------|--------------------------------------|--------------------------------|-------------------------------|-----------------------|----------|----------|-----------------------|-----------|
| | | | | 10% drop | 20% drop | 30% drop | 20°C rise | 40°C rise |
| PA6594-AE_ | 47.0 | 0.650 | 16 | 0.51 | 0.55 | 0.56 | 0.45 | 0.68 |

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

PA6594-AEC
↓

Packaging: C= 7" machine-ready reel. EIA-481 embossed plastic tape (1000 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

B= Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to C.

D= 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (3500 parts per full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms using an Agilent/HP 4192A. Inductance at 1 MHz is the same for parts with SRF ≥10 MHz.

3. DCR measured on a micro-ohmmeter.

4. SRF measured using Agilent/HP 8753ES or equivalent.

5. DC current at 25°C that causes the specified inductance drop from its value without current.

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.

7. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



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Document 435P-1 Revised 02/13/18

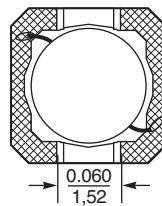
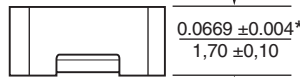
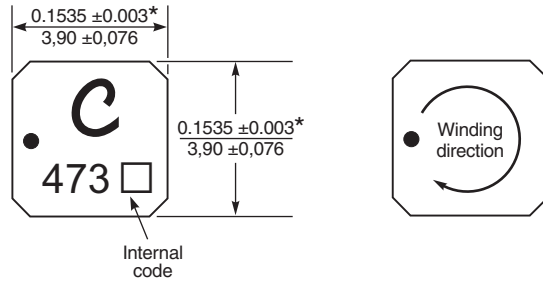
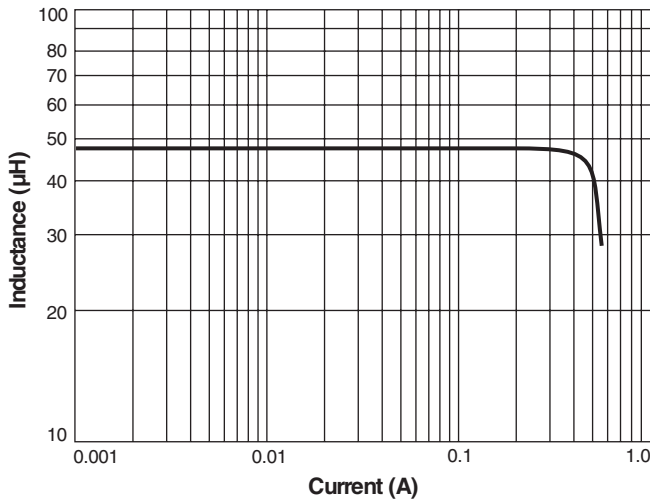
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This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

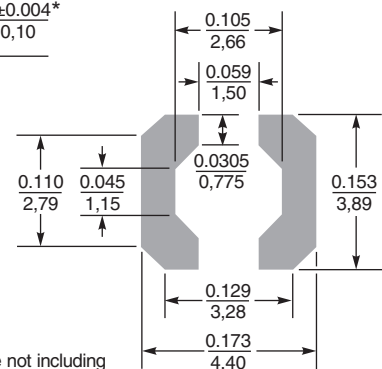


Shielded Power Inductor - PA6594-AE

L vs Current



Recommended Land Pattern



* Dimensions are of the case not including the termination. For maximum overall dimensions including the termination, add 0.005 in / 0,13 mm.

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

Packaging 1000/7" reel; 3500/13" reel Plastic tape: 12 mm wide, 0.23 mm thick, 8 mm pocket spacing, 1.9 mm pocket depth
Recommended pick and place nozzle OD: 4 mm; ID: ≤ 2 mm