Shielded Power Inductors – DS5022P

The DS5022 Series of magnetically shielded power inductors is designed for the higher current requirements of portable computers, video recorders and other DC-DC conversion applications.

They feature saturation current ratings as high as 18 Amps and rms current ratings up to 6.5 Amps. Low DC resistance (as low as 0.040 Ohms) keeps power losses to a minimum.

Coilcraft will continue to manufacture and support the DS5022P indefinitely, however for new designs, we recommend the MSS1278 as an alternative. The MSS1278 series is more cost effective, features a smaller footprint, lower DCR and better current handling.

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**PART NUMBERING SYSTEM:**

- **Termination:** L = RoHS compliant electroplated gold (<50 µin) over nickel over phos bronze.
- **Special order:** T = RoHS tin-silver-copper (95.5/4/0.5) or S = non-RoHS tin-lead (63/37).
- **Packaging:** D = 13″ machine-ready reel. EIA-481 embossed plastic tape (250 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 D.

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**SPECIFICATIONS:**

1. When ordering, please specify termination and packaging code:

- **Termination:** L = RoHS compliant electroplated gold (<50 µin) over nickel over phos bronze.
- **Special order:** T = RoHS tin-silver-copper (95.5/4/0.5) or S = non-RoHS tin-lead (63/37).
- **Packaging:** D = 13″ machine-ready reel. EIA-481 embossed plastic tape (250 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer ($25 charge).

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc.
3. DC current at which the inductance drops from its value without current.
4. Current that causes a 40°C temperature rise from 25°C ambient.
5. Electrical specifications at 25°C.

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**COILCRAFT**

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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.
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Typical L vs Current

Typical L vs Frequency

Current Derating

* Allow an additional 0.01/0.254 in width and 0.005/0.127 in length for optional tin-lead and tin-silver-copper application.

Recommended Land Pattern


Dimensions are in inches/ mm