

# High Power SMT Shielded Drum Core Inductors Provide High Efficiency In Smaller Package Sizes

The Coiltronics® DR Series of Single and Dual Winding Inductors Provide Design Flexibility with the Highest Performance and Current Ratings in its Class

- High Power Density & Performance
  - These high energy density SMT inductors provide the highest performance levels in the smallest, most cost-effective packages.
  - Optimized best peak current performance can reduce the need for using a larger package size.
  - High efficiency delivers lowest high-frequency losses.
  - Operating temperature -40°C to +125°C.
  - RoHS compliant and lead free.
  - Ideal for cost-sensitive, space-constrained applications.
- DR Inductors
  - Designed for buck and boost converters.
  - Inductance range from 0.33 $\mu$ H to 1mH
  - Available in 7.5, 10.5 and 12.5mm square from 3 to 8mm high.
- DRQ Inductors
  - Designed for SEPIC, flyback, 1:1 isolation transformer, and buck and boost converters.
  - Two windings permit use as a coupled inductor or combined in series for high inductance.
  - Inductance range from 0.33 $\mu$ H to 4.02mH
  - 200Vac isolation between windings.
  - Available in 7.5 and 12.5mm square from 3.55 to 8mm high.



# DR10, DRQ and DR Series Specifications



Catalog Symbols: DR1030, DR1040, DR1050  
DRQ73, DRQ74, DRQ125, DRQ127  
DR73, DR74, DR124, DR125, DR127

Technology: Shielded drum core inductors



DR1040



DRQ125



DR124

Specifications	DR10 Series (30, 40, 50)	DRQ Series (73, 74, 125, 127)	DR Series (73, 74, 124, 125, 127)
Inductance range	0.7 $\mu$ H-1mH	0.33 $\mu$ H-4.02mH	0.33 $\mu$ H-1mH
Current range	0.43-13.5A	0.13-56A	0.25-56A
Footprint/profile (mm)	W x L x H	W x L x H	W x L x H
DR1030	10.3 x 10.5 x 3.0		
DR1040	10.3 x 10.5 x 4.0		
DR1050	10.3 x 10.5 x 5.0		
DRQ & DR73		7.6 x 7.6 x 3.55	7.6 x 7.6 x 3.55
DRQ & DR74		7.6 x 7.6 x 4.45	7.6 x 7.6 x 4.35
DR124			12.3 x 12.3 x 4.5
DRQ & DR125		12.5 x 12.5 x 6.0	12.5 x 12.5 x 6.0
DRQ & DR127		12.5 x 12.5 x 8.0	12.5 x 12.5 x 8.0

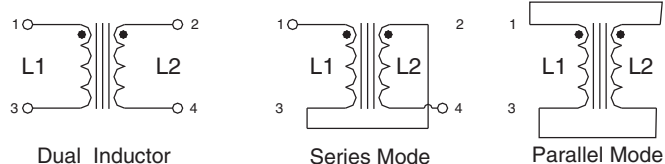
## Typical Applications:

- Computer, DVD players, and portable power devices
- Notebook power
- LCD panels
- LED driver
- Wireless modems
- ADSL line cards
- Battery chargers
- Video cards

## Typical Topologies:

- Buck
- Boost
- Forward Converter Inductor
- Input/Output filter
- SEPIC (DRQ)
- Flyback (DRQ)

## DRQ Series Schematics



## Environmental Data - DR10, DRQ and DR Series:

- Storage temperature range: -40°C to +125°C
- Operating temperature range: -40°C to +125°C (range is application specific)
- Solder reflow temperature: +260°C maximum for 10 seconds maximum

## Packaging:

- Supplied in tape and reel packaging. Parts per reel: DR1030 (1000), DR1040 (850), DR1050 (500), DRQ73 (1350), DRQ74 (1100), DRQ125 (600), DRQ127 (350), DR73 (1350), DR74 (1100), DR124 (750), DR125 (600), DR127 (350)

Order samples online - [www.cooperbusmann.com](http://www.cooperbusmann.com)

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