

# Automotive Power Magnetics

## Inductor Design Kit



## HCMA High Current Automotive Iron Powder Inductors



*Powering Business Worldwide*



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# HCMA Automotive Inductors

- AEC-Q200 tested and qualified (Grade 3)
- Rugged, flexible construction; highly resistant to shock and vibration environments
- Handles high transient inrush current spikes
- High current carrying capacity
- Low core losses
- Magnetically shielded, low EMI
- Iron Powder core material

## Applications:

### Body Electronics

- Central body control module
- Vehicle access control system
- Headlamps, tail lamps and interior lighting
- Heating Ventilation and Air Conditioning (HVAC) controllers
- Doors, window lift and seat control

### Advanced driver assistance systems

- Adaptive cruise control (ACC)
- Automatic parking control
- Collision avoidance system
- Car black box system

### Infotainment and cluster electronics

- Audio subsystem: head unit and trunk amp
- Digital instrument cluster
- In-Vehicle Infotainment (IVI) and navigation

### Chassis and safety electronics

- Airbag control unit
- Electronic Stability Control system (ESC)
- Electric parking brake

## Kit content and product specifications

| Family                   | Inductance range (µH) | I <sub>rms</sub> range (A) | I <sub>sat</sub> range (A) | DCR range (mΩ) typ |
|--------------------------|-----------------------|----------------------------|----------------------------|--------------------|
| <a href="#">HCMA0503</a> | 0.20-15.0             | 2.4-22                     | 2.1-21                     | 2.1-138            |
| <a href="#">HCMA0703</a> | 0.15-33.0             | 1.8-26                     | 2.0-52                     | 1.9-220            |
| <a href="#">HCMA1104</a> | 0.20-10               | 7.5-32                     | 8.5-45                     | 0.6-27             |
| <a href="#">HCMA1305</a> | 0.10-33.0             | 5.2-55                     | 8-118                      | 0.5-74             |
| <a href="#">HCMA1707</a> | 1.5-68                | 5.2-40                     | 6.5-40                     | 1.85-74            |

|                                                                                                                                                                                  |                                                                                                                                              |                                                                                                                                                                |                                                    |                                                    |                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------|
| HCMA0503-R20-R<br>HCMA0503-R35-R<br>HCMA0503-R47-R<br>HCMA0503-R75-R<br>HCMA0503-1R0-R<br>HCMA0503-1R5-R<br>HCMA0503-220-R<br>HCMA0503-2R2-R<br>HCMA0503-3R3-R<br>HCMA0503-4R7-R | HCMA0503-5R6-R<br>HCMA0503-100-R<br>HCMA0503-150-R<br>HCMA0703-R15-R<br>HCMA0703-R22-R<br>HCMA0703-R47-R<br>HCMA0703-R68-R<br>HCMA0703-R82-R | HCMA0703-1R0-R<br>HCMA0703-1R5-R<br>HCMA0703-2R2-R<br>HCMA0703-3R3-R<br>HCMA0703-4R7-R<br>HCMA0703-6R8-R<br>HCMA0703-8R2-R<br>HCMA0703-100-R<br>HCMA0703-330-R | HCMA1305-R10-R<br>HCMA1305-R22-R<br>HCMA1305-R33-R | HCMA1305-R47-R<br>HCMA1305-R56-R<br>HCMA1305-R68-R | HCMA1305-R82-R<br>HCMA1305-1R0-R<br>HCMA1305-1R5-R                   |
| HCMA1305-1R8-R<br>HCMA1305-2R2-R<br>HCMA1305-3R3-R                                                                                                                               | HCMA1305-4R7-R<br>HCMA1305-5R6-R<br>HCMA1305-6R8-R                                                                                           | HCMA1305-7R8-R<br>HCMA1305-8R2-R<br>HCMA1305-100-R                                                                                                             | HCMA1305-150-R<br>HCMA1305-220-R<br>HCMA1305-330-R | HCMA1104-R20-R<br>HCMA1104-R36-R<br>HCMA1104-R45-R | HCMA1104-R56-R<br>HCMA1104-R90-R<br>HCMA1104-1R0-R<br>HCMA1104-1R5-R |
| HCMA1104-2R2-R<br>HCMA1104-3R3-R<br>HCMA1104-4R7-R<br>HCMA1104-100-R                                                                                                             | HCMA1707-1R5-R<br>HCMA1707-2R2-R                                                                                                             | HCMA1707-4R7-R<br>HCMA1707-6R8-R                                                                                                                               | HCMA1707-8R2-R<br>HCMA1707-100-R                   | HCMA1707-150-R<br>HCMA1707-220-R                   | HCMA1707-330-R<br>HCMA1707-470-R<br>HCMA1707-680-R                   |



## Resources

Datasheets: [www.eaton.com/elx-datasheets](http://www.eaton.com/elx-datasheets)

Samples: [www.eaton.com/elx-samples](http://www.eaton.com/elx-samples)

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