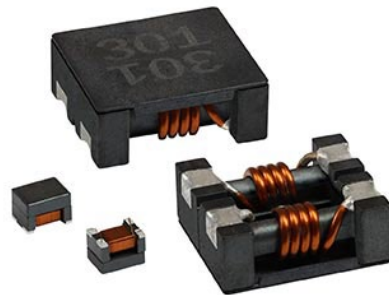


Automotive Grade Ferrite Common Mode Chokes Save Board Space While Increasing Efficiency; AEC-Q200 Qualified Devices Deliver Current Up to 14 A, Impedance to 11 Ω at 100 MHz, and Low DCR Down to 0.4 m Ω in Compact Case Sizes

Product Benefits:

- Low DCR from 0.4 m Ω to 12 m Ω
- High current capability up to 14 A
- High impedance up to 11 Ω at 100 MHz
- Compact 5050, 6050, 1210, and 1812 case sizes
- High temperature operation up to +150 °C
- AEC-Q200 qualified
- Suitable for reflow soldering and compatible with automated pick and place assembly
- RoHS-compliant, halogen-free, and [Vishay Green](#)



Market Applications:

- Noise suppression and filtering for DC/DC power supplies, LCD displays, lighting drivers, in-vehicle Ethernet networks, and battery powered devices

The News:

Vishay Intertechnology expands its portfolio of Automotive Grade common mode chokes with four new surface-mount devices designed to improve system efficiency while saving board space. Offered in compact case sizes, the Vishay Dale ICM5050-A, ICM6050-A, IFLN-1210BE-A, and IFLN-1812CZ-A combine low DCR with high current capability and impedance.

- While toroidal common mode chokes typically provide DCR of 23 m Ω , the ICM5050-A, ICM6050-A, IFLN-1210BE-A, and IFLN-1812CZ-A offer low DCR from 0.4 m Ω to 12 m Ω to reduce power losses and increase efficiency
- The ICM5050-A and ICM6050-A are wirewound ferrite common mode chokes that offer high current capabilities up to 11 A in the 5050 case size and 14 A in the 6050 case size. With footprints of 12.0 mm x 11.0 mm x 6.0 mm and 15.0 mm x 13.0 mm x 6.0 mm, respectively, the devices can save board space by replacing larger toroidal common mode chokes, which typically measure 19 mm x 30 mm x 28 mm
- The IFLN-1210BE-A and IFLN-1812CZ-A are ferrite common mode chokes with precision winding. The devices provide excellent common mode impedance up to 11 Ω at 100 MHz in the compact 1210 and 1812 case sizes, making them ideal for suppressing EMI noise in CAN, LAN, and automotive DC/DC converters



The Key Specifications:

Part #		ICM5050-A	ICM6050-A	IFLN-1210BE-A	IFLN-1812CZ-A
Common mode impedance typ. (Ω)	@ 10 MHz	160 to 850	40 to 80	550 to 5100	600 to 5800
	@ 100 MHz	500 to 1700	300 to 700	2200 to 11 000	4000 to 5200
Inductance (μ H)		—	—	11 to 100	11 to 100
DCR max. (m Ω)		4 to 12	3.5 to 5	0.4 to 1.5	0.6 to 2
Heat rating current typ. (A)		5.5 to 11 ⁽¹⁾	10 to 14 ⁽¹⁾	0.150 to 0.300 ⁽²⁾	0.200 to 0.360 ⁽²⁾
Case size		5050	6050	1210	1812
Dimensions (mm)		12.0 x 11.0 x 6.0	15.0 x 13.0 x 6.0	3.2 x 2.5 x 2.5	4.5 x 3.2 x 3.0
Operating temp. (°C)		-40 to +125	-40 to +125	-55 to +150	-55 to +150

⁽¹⁾ DC current (A) that will cause an approximate ΔT of 40 °C

⁽²⁾ DC current (A) that will cause an approximate ΔT of 20 °C

Availability:

Samples and production quantities of the new common mode chokes are available now, with lead times of 10 to 12 weeks.

To access the product datasheets on the Vishay Website, go to

<http://www.vishay.com/ppg?34693> (ICM5050-A)

<http://www.vishay.com/ppg?34694> (ICM6050-A)

<http://www.vishay.com/ppg?34668> (IFLN-1210BE-A)

<http://www.vishay.com/ppg?34669> (IFLN-1812CZ-A)

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