

SMD Common Mode Choke

HA204 Series



Features:

- Operating temperature range -40°C to $+125^{\circ}\text{C}$
- AEC-Q200
- Low profile surface mount
- Compact design
- Various common mode and differential mode characteristic



Description:

The HA204 series SMD Common Mode Choke (CMC) consists of total 7 part numbers. There are various impedance range from 100Ω up to 2500Ω with rated current at 9.0A maximum. The impedance is measured at 100MHz. Impedance performance curve (common mode and differential mode) can be found in datasheet. The insulation resistance between two windings is $10\text{M}\Omega$ minimum. A maximum dimension is 8.0x6.2x4.0 mm. It has low profile and compact design for surface mounting. The HA204 series is AEC-Q200 certified.

Applications:

- EMI noise suppression for in-vehicle ethernet electronic control unit like advanced driver-assistance systems (ADAS), infotainment, navigation system, etc.

General Note

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Electrical Specifications

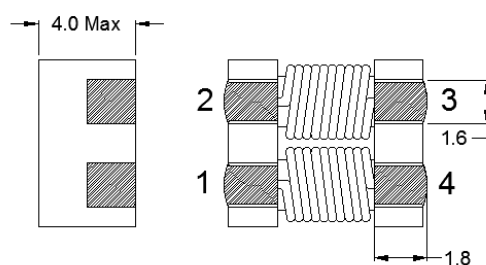
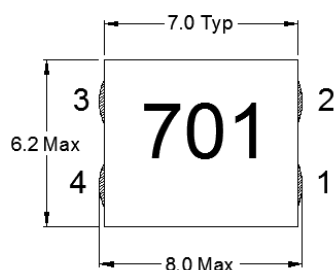
Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PART NUMBER	IMPEDANCE (Ω)		DCR ($\text{m}\Omega$)	RATED CURRENT (A)	INSULATION RESISTANCE ($\text{M}\Omega$) MIN
	Min	Typical	Max		
HA204-7060141LFTR	100	140	10.0	9.0	10.0
HA204-7060301LFTR	225	300	10.0	5.0	10.0
HA204-7060701LFTR	500	700	15.0	4.0	10.0
HA204-7060102LFTR	800	1000	17.0	3.0	10.0
HA204-7060132LFTR	910	1300	21.0	2.5	10.0
HA204-7060272LFTR	2000	2700	63.0	1.0	10.0
HA204-7060302LFTR	2500	3000	75.0	0.9	10.0

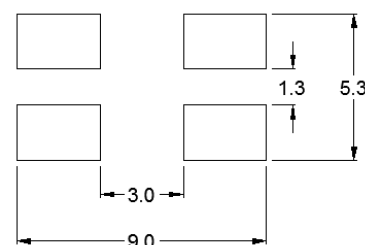
Notes:

- (1) Impedance is measured at 100MHz, 0.1Vrms
- (2) Rated current is the approximate DC current at which $\Delta T = 40^\circ\text{C}$

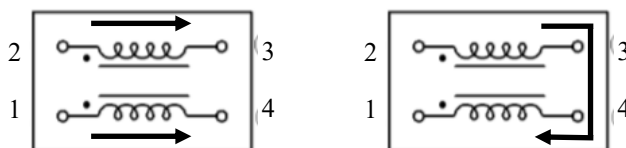
Outline Dimensions (mm)



PCB layout



Schematic Diagram



Common Mode

Differential Mode

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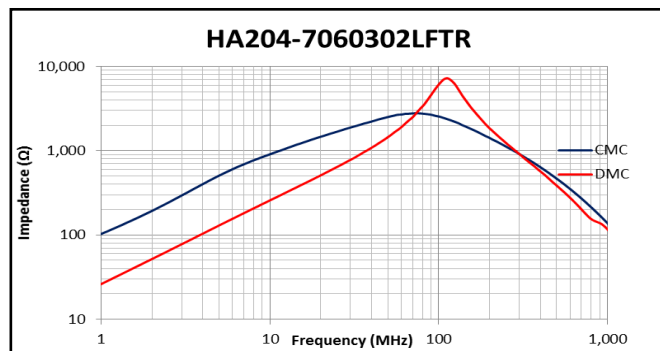
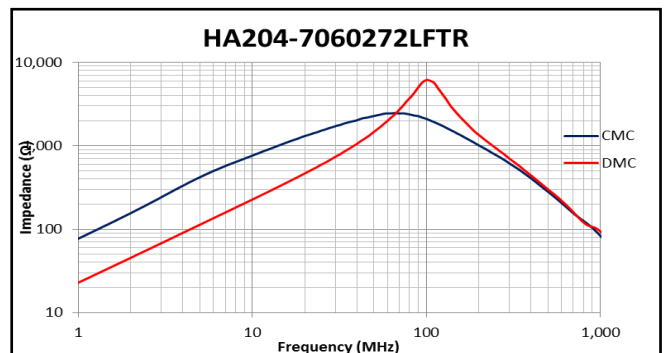
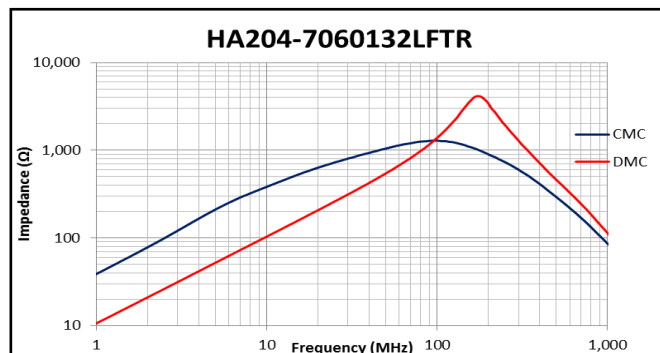
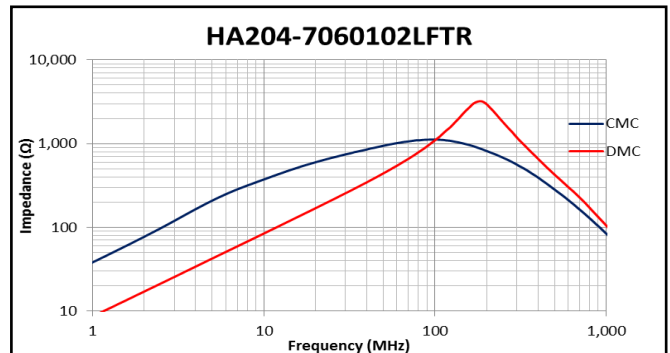
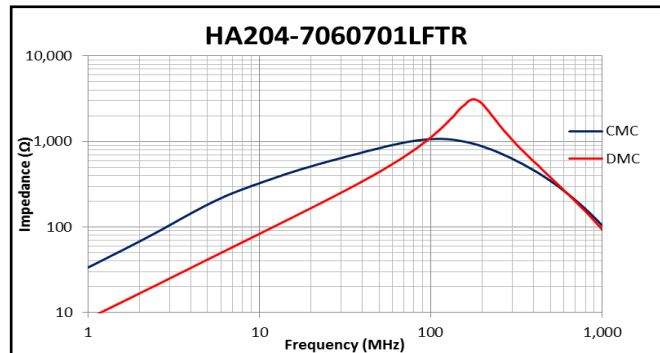
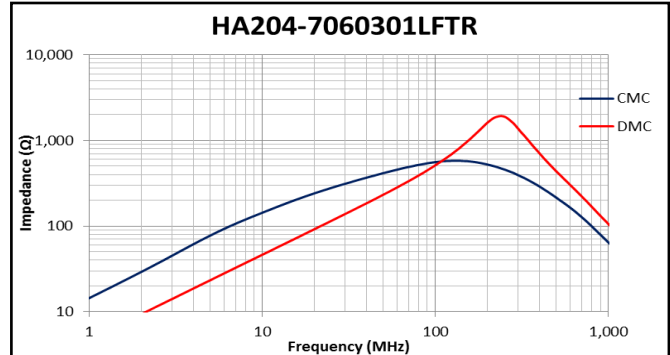
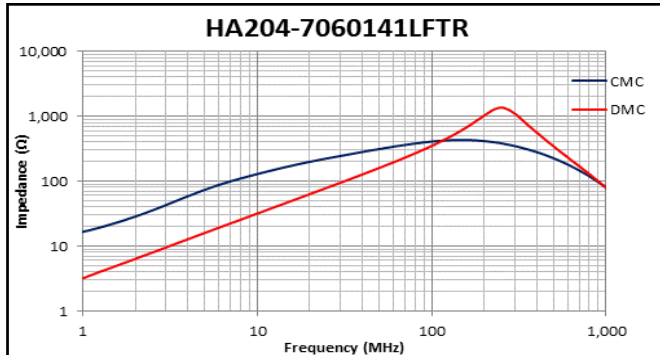
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Performance



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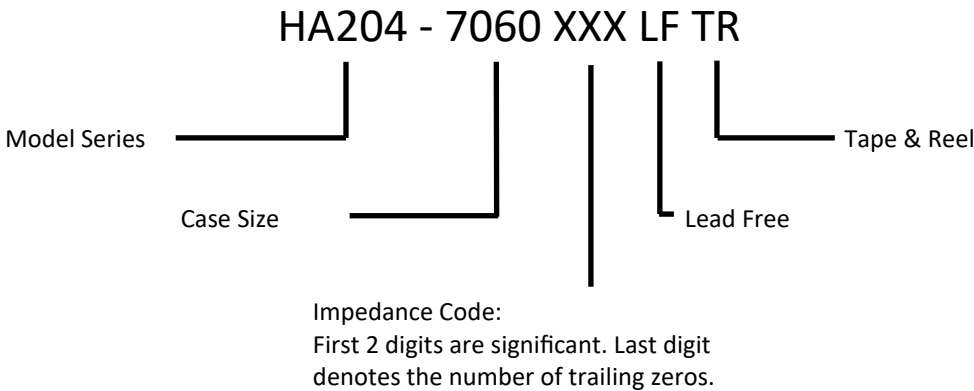
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Packaging



One reel	1100pcs
One shipping carton	4 reels or 4400pcs