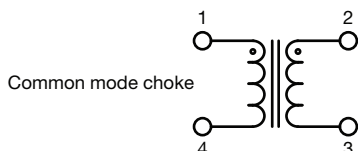
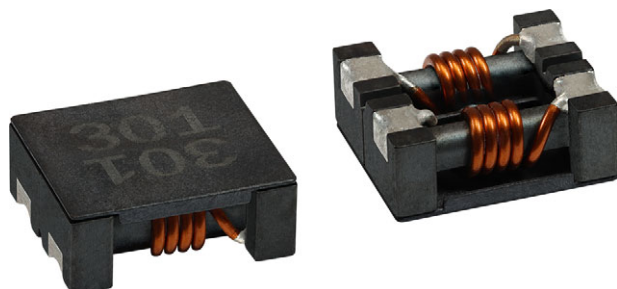


High Current, SMD Common Mode Choke



FEATURES

- Wirewound ferrite common mode choke
- 15.0 mm x 13.0 mm x 6.0 mm SMD package
- AEC-Q200 qualified
- Material categorization:
for definitions of compliance please see
www.vishay.com/doc?99912

AUTOMOTIVE
GRADE

RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

APPLICATIONS

- DC/DC power supplies
- LCD displays
- Noise suppression and filtering
- Lighting drivers
- Battery powered devices

ELECTRICAL SPECIFICATIONS

Resistance to solder heat: 245 °C peak for < 30 s (3 times max. through reflow)

LINKS TO ADDITIONAL RESOURCES



Product Page

STANDARD ELECTRICAL SPECIFICATIONS				
PART NUMBER	COMMON MODE IMPEDANCE, AT 10 MHz, TYP. (Ω)	COMMON MODE IMPEDANCE, AT 100 MHz, TYP. (Ω)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) ⁽¹⁾
ICM6050ER301NA	40	300	3.5	14
ICM6050ER551MA	60	550	4	10
ICM6050ER701NA	80	700	5	10

Notes

- All test data is referenced to 25 °C ambient
 - DCR specification is for a single coil
 - Rated operating voltage = 125 V_{DC}
 - Insulating resistance 10 MΩ min.
 - Operating temperature range -40 °C to +125 °C
 - Storage condition: -40 °C to +125 °C (on board); less than 40°C and < 60 % RH (in component packaging)
- ⁽¹⁾ DC current (A) that will cause an approximate ΔT of 40 °C

DIMENSIONS in inches [millimeters]										
A	B	C	D	E	F	G	L	H	G1	G2
0.591 ± 0.020 [15.0 ± 0.5]	0.512 ± 0.016 [13.0 ± 0.4]	0.236 max. [6.0 max.]	0.366 typ. [9.3 typ.]	0.106 ± 0.020 [2.7 ± 0.5]	0.142 ± 0.020 [3.6 ± 0.5]	0.110 ± 0.020 [2.8 ± 0.5]	0.670 ref. [17.0 ref.]	0.362 ref. [9.2 ref.]	0.409 ref. [10.4 ref.]	0.150 ref. [3.8 ref.]



GLOBAL PART NUMBER

I C M
PRODUCT
FAMILY

6 0 5 0
SIZE

E R
PACKAGE CODE

ER = tape and reel

3 0 1
IMPEDANCE
VALUE

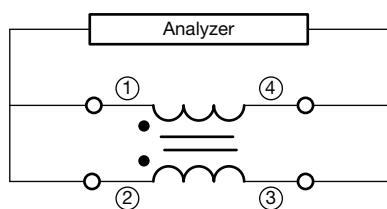
301 = 500 Ω

R A
TOLERANCE AUTOMOTIVE
SERIES

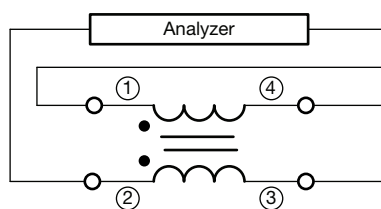
M = 20 %
N = 25 %

SCHEMATICS

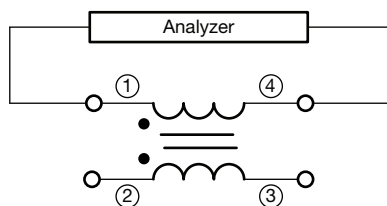
Common Mode Impedance



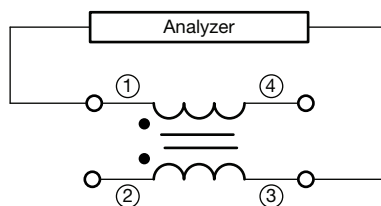
Differential Mode Impedance

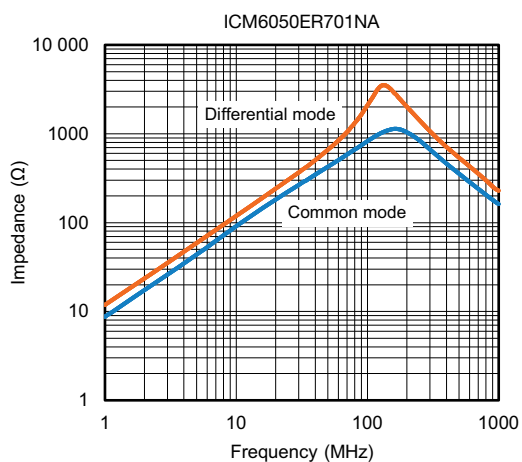
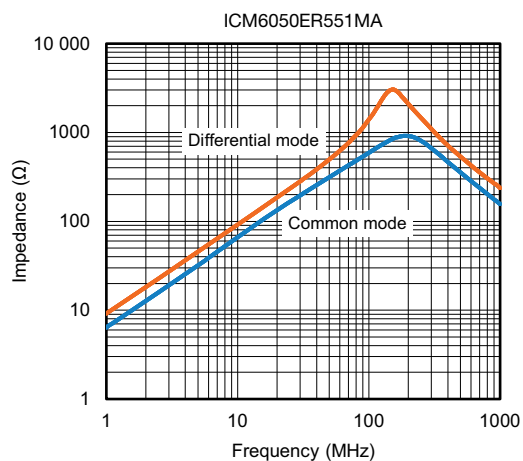
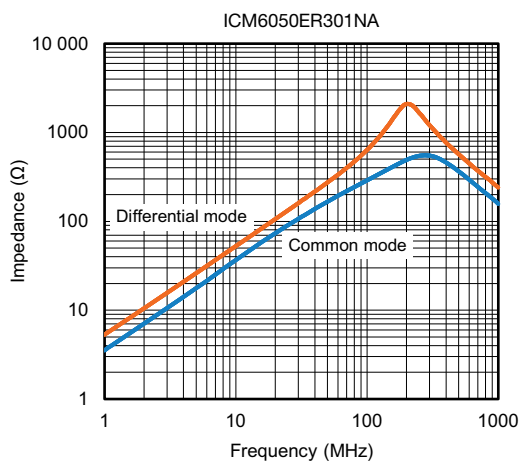


DC Resistance



Insulation Resistance



PERFORMANCE GRAPHS




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