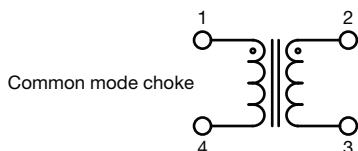
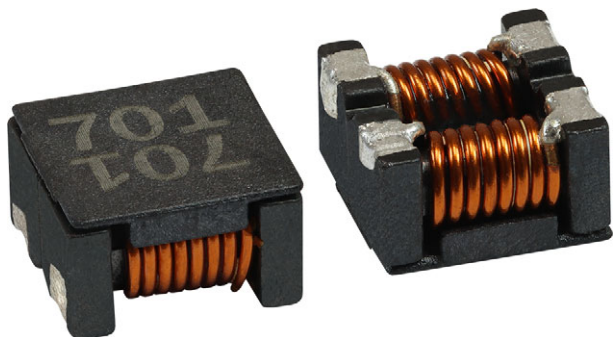


Automotive, High Current, Common Mode Choke



FEATURES

- Wirewound ferrite common mode choke
- 5.5 mm x 5.5 mm x 3.5 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 for automotive
- LCD displays
- Noise suppression and filtering
- Lighting drivers
- LED driver

ELECTRICAL SPECIFICATIONS

Resistance to solder heat: 250 °C peak for < 30 s (3 times max. through reflow)

LINKS TO ADDITIONAL RESOURCES



Product Page

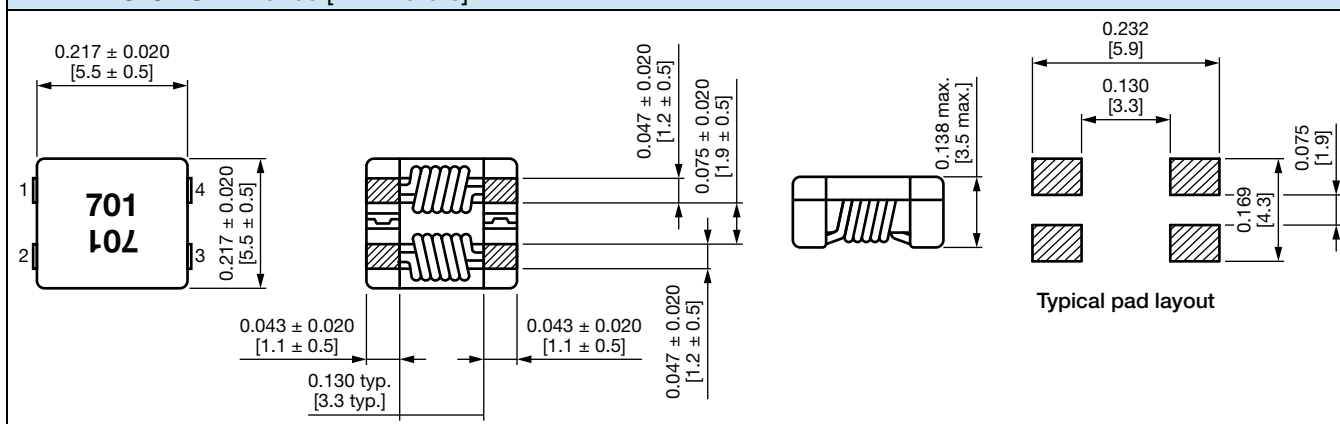
STANDARD ELECTRICAL SPECIFICATIONS

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⁾
ICM2020ER101RA	50	100	6	8.5
ICM2020ER301RA	70	300	7.5	4.8
ICM2020ER501RA	150	500	10.5	4.5
ICM2020ER701RA	200	700	13	3.8
ICM2020ER102RA	250	1000	20	3.0
ICM2020ER142RA	300	1400	38	2.8

Notes

- All test data is referenced to 25 °C ambient
 - Rated operating voltage = 80 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]





GLOBAL PART NUMBER

I C M
PRODUCT
FAMILY

2 0 2 0
SIZE

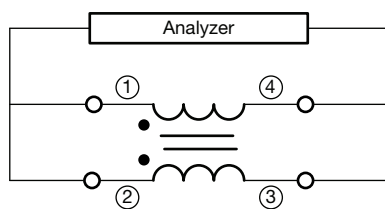
E R
PACKAGE CODE
ER = tape and reel

3 0 1
IMPEDANCE
VALUE
301 = 300 Ω

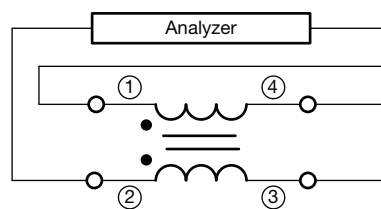
R A
TOLERANCE AUTOMOTIVE
SERIES
R = 50 %

SCHEMATICS

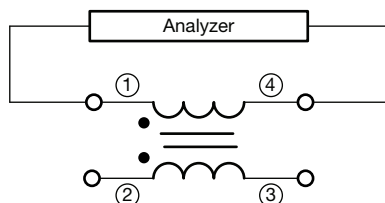
Common Mode Impedance



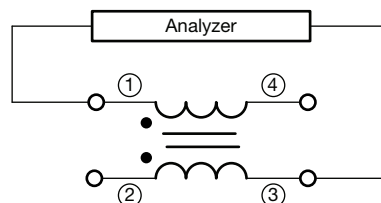
Differential Mode Impedance



DC Resistance

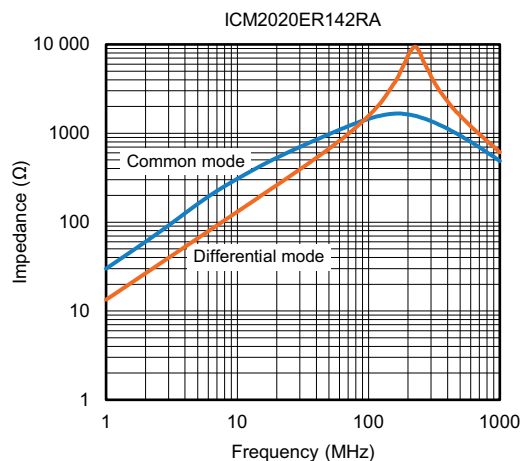
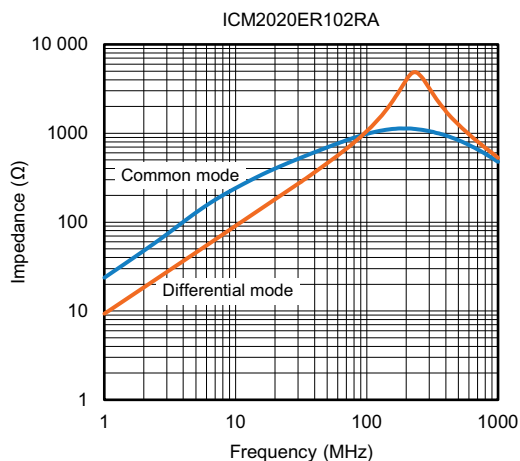
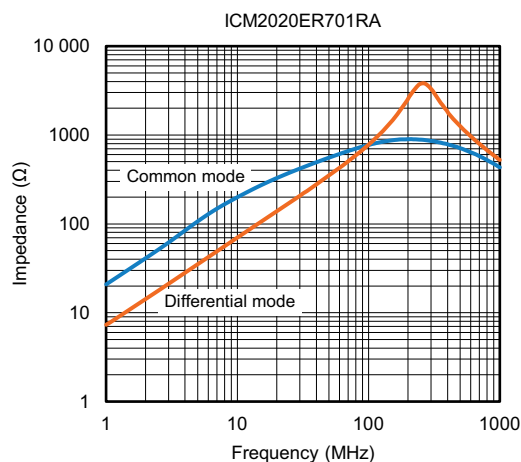
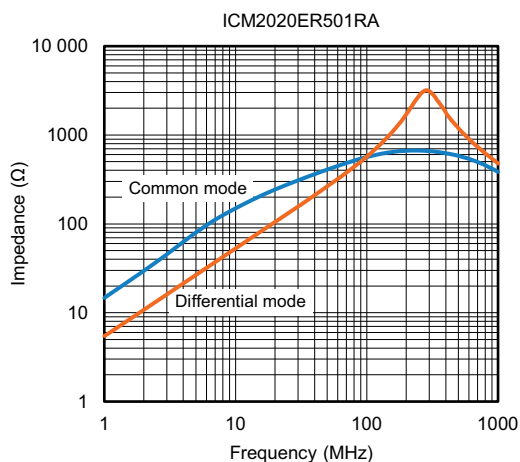
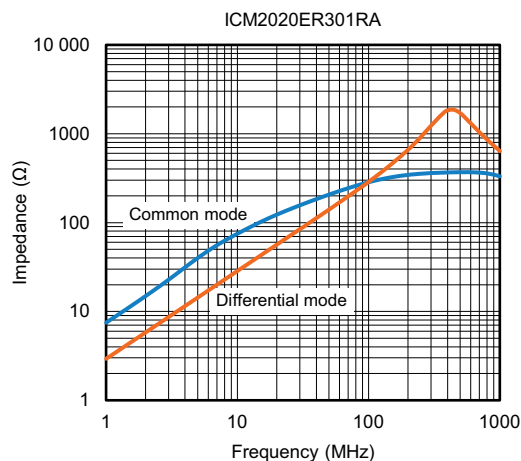
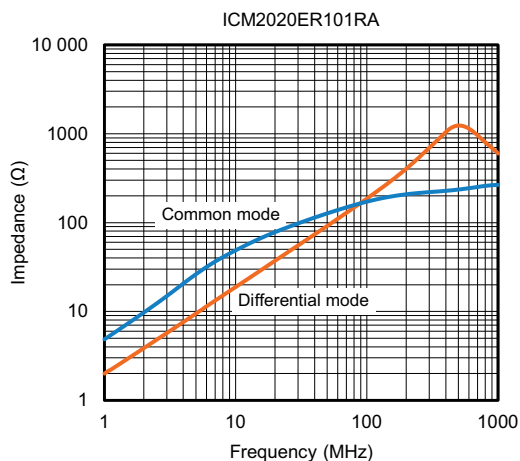


Insulation Resistance





PERFORMANCE GRAPHS





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