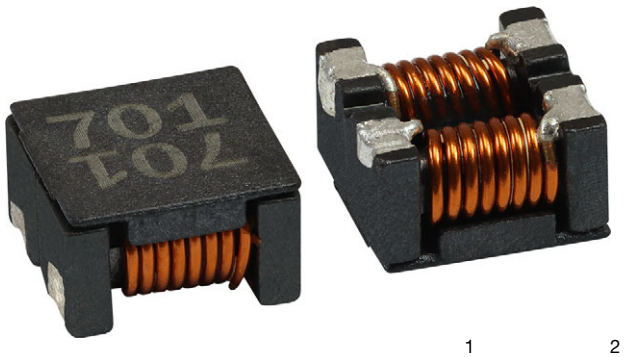
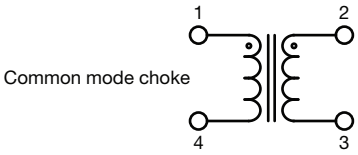
High Current, SMD Common Mode Choke





FEATURES

- Wirewound ferrite common mode choke
- 5.5 mm x 5.5 mm x 3.5 mm SMD package
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

HALOGEN FREE GREEN (5-2008)

APPLICATIONS

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

LINKS TO ADDITIONAL RESOURCES

Product Page

ELECTRICAL SPECIFICATIONS

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

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)
ICM2020ER101R	50	100	6	8.5
ICM2020ER301R	70	300	7.5	4.8
ICM2020ER501R	150	500	10.5	4.5
ICM2020ER701R	200	700	13	3.8
ICM2020ER102R	250	1000	20	3.0
ICM2020ER142R	300	1400	38	2.8

Notes

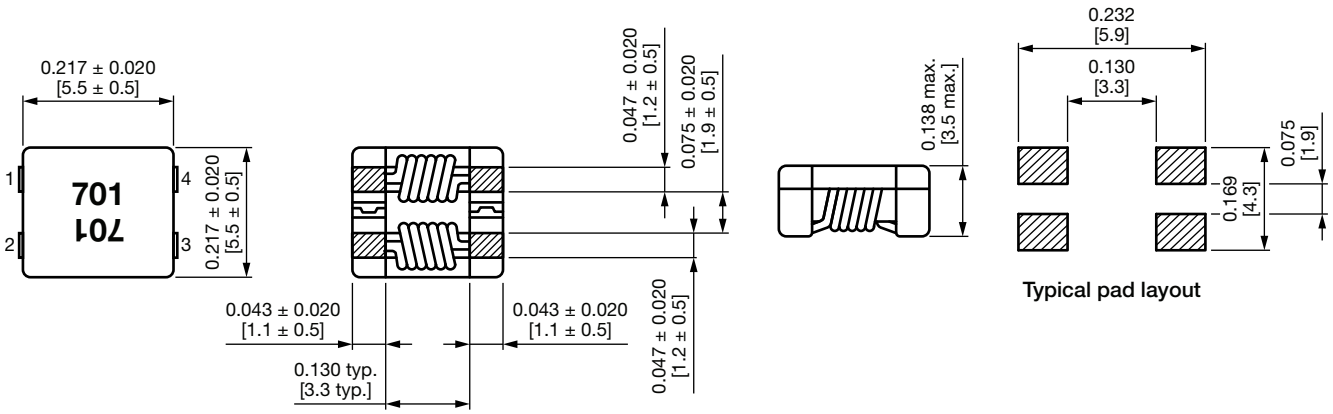
- All test data is referenced to 25 °C ambient
- DCR specification is for a single coil
- Rated operating voltage = 80 V_{DC}
- Insulating resistance 10 MΩ min.
- Operating temperature range -55 °C to +125 °C
- Storage condition: -40 °C to +125 °C (on board); less than 40°C and < 60 % RH (in component packaging)

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

For technical questions, contact: magnetics@vishay.com

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DIMENSIONS in inches [millimeters]

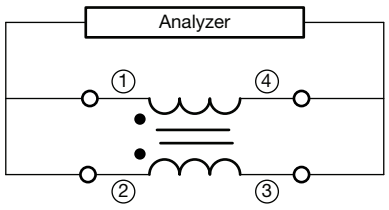


GLOBAL PART NUMBER

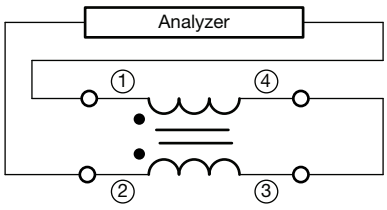
I C M	2 0 2 0	E R	3 0 1	R
PRODUCT FAMILY	SIZE	PACKAGE CODE	IMPEDANCE VALUE	TOLERANCE
		ER = tape and reel	**301** = 300 Ω	**R** = 50 %

SCHEMATICS

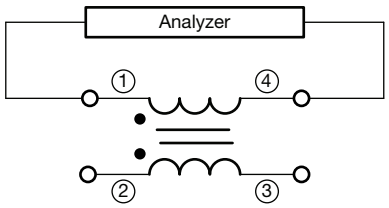
Common Mode Impedance



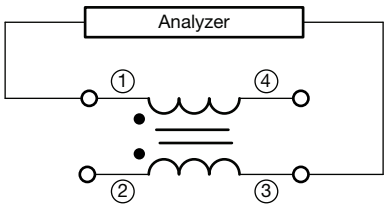
Differential Mode Impedance



DC Resistance



Insulation Resistance

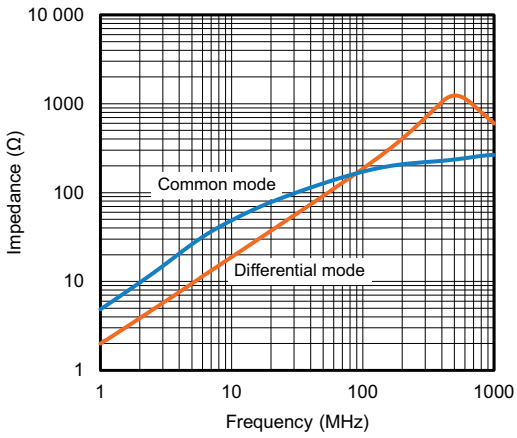


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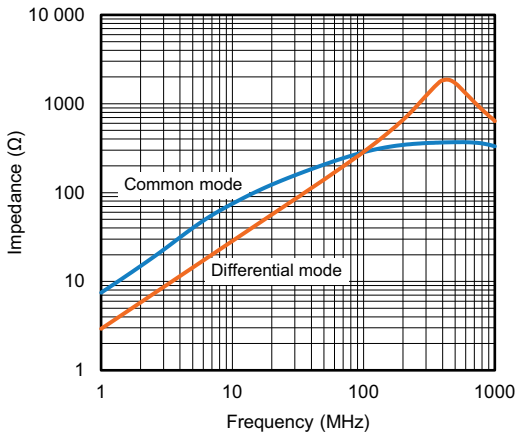
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PERFORMANCE GRAPHS

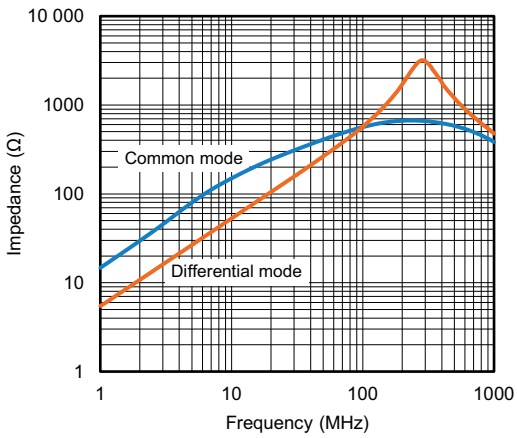
ICM2020ER101R



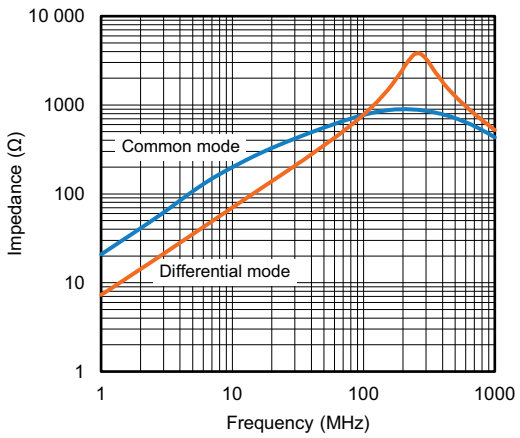
ICM2020ER301R



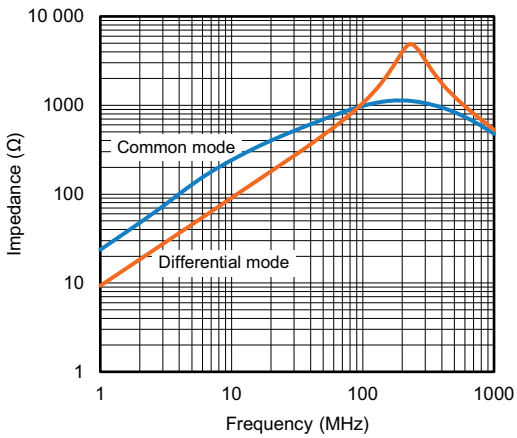
ICM2020ER501R



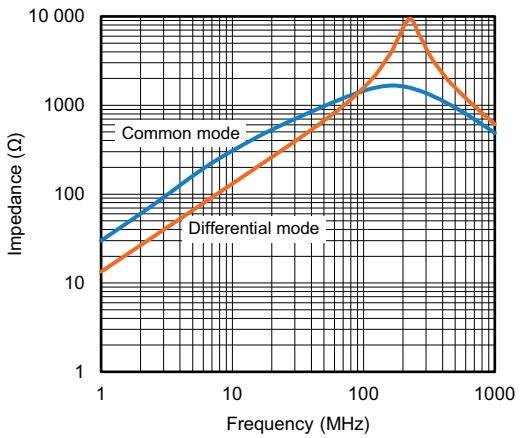
ICM2020ER701R



ICM2020ER102R



ICM2020ER142R



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