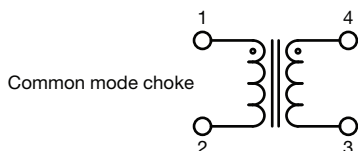
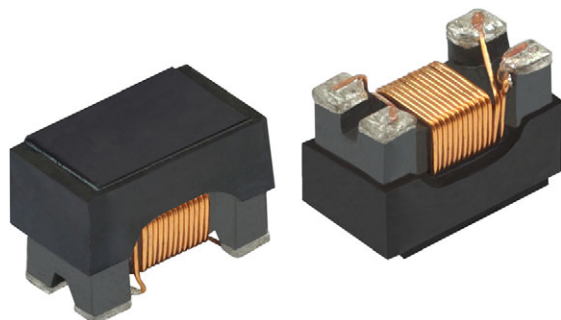


# Surface-Mount Common Mode Choke



## FEATURES

- Wirewound ferrite common mode choke
- 1.6 mm x 0.85 mm x 1.25 mm SMD package
- Material categorization:  
for definitions of compliance please see  
[www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**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](#)

## STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	COMMON MODE IMPEDANCE, AT 10 MHz, TYP. ( $\Omega$ )	COMMON MODE IMPEDANCE, AT 100 MHz, TYP. ( $\Omega$ )	DCR MAX. 25 °C (m $\Omega$ )	HEAT RATING CURRENT DC TYP. (A) <sup>(1)</sup>
ICM0603ER220V	3.0	22	80	0.5
ICM0603ER450V	5.7	45	110	0.5
ICM0603ER900V	12.3	90	145	0.5
ICM0603ER121V	17.4	120	175	0.5
ICM0603ER181V	23.1	180	210	0.5
ICM0603ER251V	35.8	250	280	0.4

### Notes

- All test data is referenced to 25 °C ambient
  - Rated operating voltage = 50 V<sub>DC</sub>
  - Rated dielectric withstanding voltage = 125 V<sub>DC</sub>
  - Insulating resistance 10 M $\Omega$  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)
- <sup>(1)</sup> DC current (A) that will cause an approximate  $\Delta T$  of 40 °C

## DIMENSIONS in inches [millimeters]

A	B	C	D1	D2	E	L	H	G1	G2
0.063 ± 0.006 [1.60 ± 0.15]	0.033 ± 0.006 [0.85 ± 0.15]	0.043 ± 0.006 [1.10 ± 0.15]	0.012 typ. [0.30 typ.]	0.012 typ. [0.30 typ.]	0.001 min. [0.03 min.]	0.083 ref. [2.10 ref.]	0.039 ref. [1.00 ref.]	0.028 ref. [0.70 ref.]	0.012 ref. [0.30 ref.]

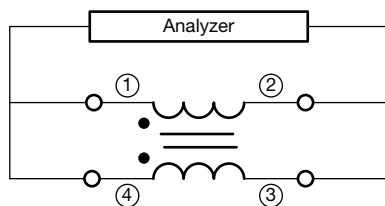


## GLOBAL PART NUMBER

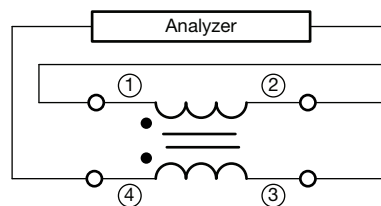
<b>I</b>	<b>C</b>	<b>M</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>3</b>	<b>E</b>	<b>R</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>V</b>
PRODUCT FAMILY			SIZE			PACKAGE CODE		IMPEDANCE VALUE			TOLERANCE	
						ER = tape and reel		220 = 22 $\Omega$			V = 25 %	

## SCHEMATICS

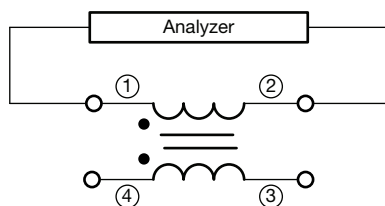
Common Mode Impedance



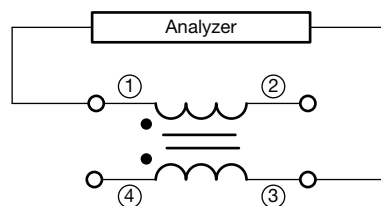
Differential Mode Impedance

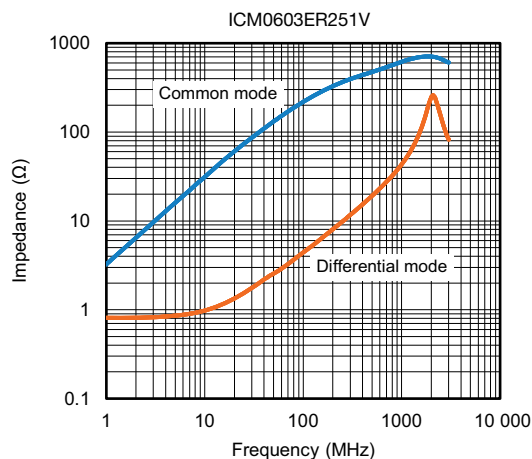
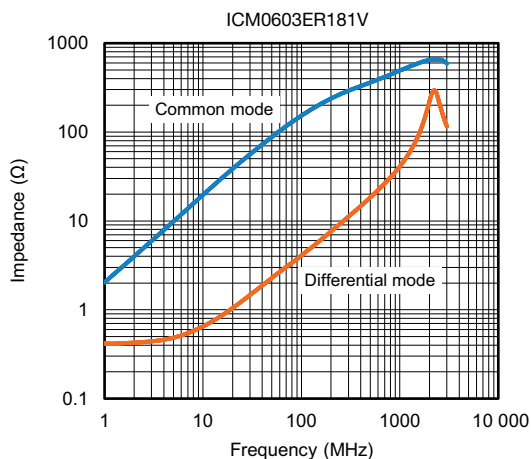
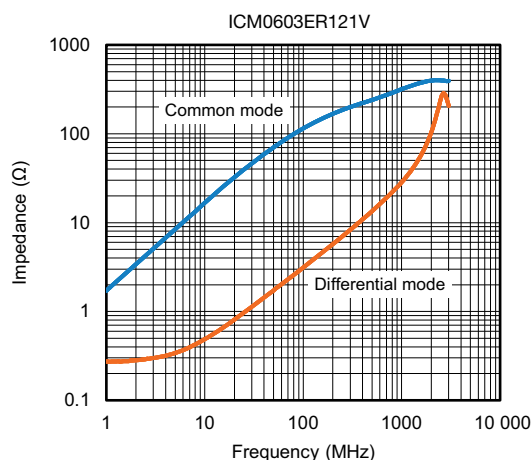
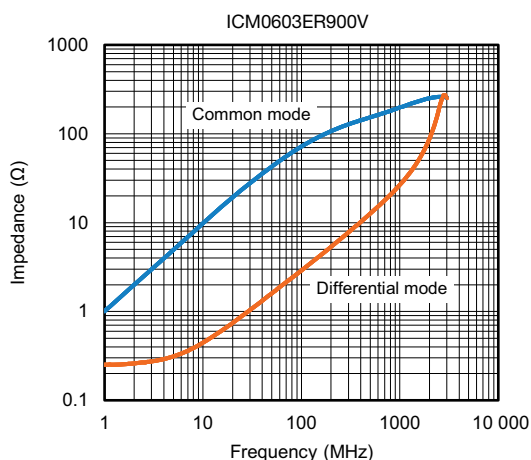
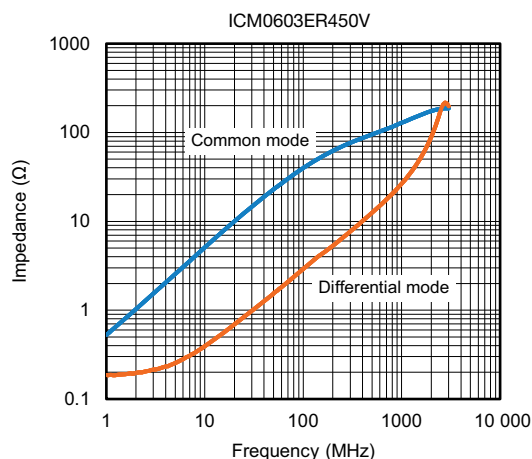
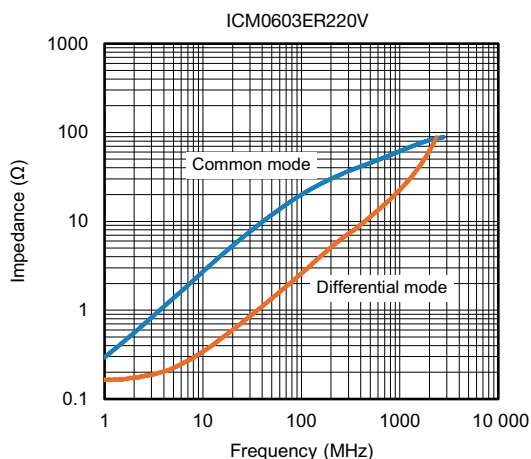


DC Resistance



Insulation Resistance



**PERFORMANCE GRAPHS**




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