

Data Sheet

- ITEM : choke coil
- PART NO : CWA452P510FR
- CONDITION :
 1. _____
 2. _____
 3. _____
 4. _____

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Choke coil	CWA452P510FR	2/4

1. Features

- Effective for suppressing common mode noise and almost no effect for differential data line.
- Data signals up to some MHz can pass unaffectedly.
- When mounting, the terminal and winding tape splicing part do not fuse.
- It is a product conforming to RoHS directive.
- Lead-free products
- Operating temperature range : -40°C ~ 150°C
- Qualified to AEC-Q200 Standards.

2. Applications

- Automotive CAN bus systems

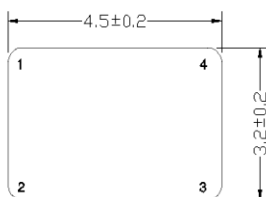
3. Product specifications

C W A 45 2P 510 F R
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

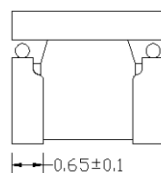
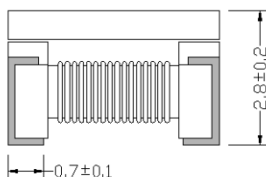
- ① Series name : Choke coil
- ② Winding Type : Wire wound
- ③ Application : Automotive
- ④ Dimensions : 4.5mm (L) x 3.2mm (W)
- ⑤ The number of lines : 2P = 2 lines
- ⑥ Common Mode Inductance (@100kHz) : 510 = 51uH
- ⑦ Type of electrode plating : Lead Free
- ⑧ Packing Type : Reel Embossed Taping

4. Dimension & Recommended Footprint

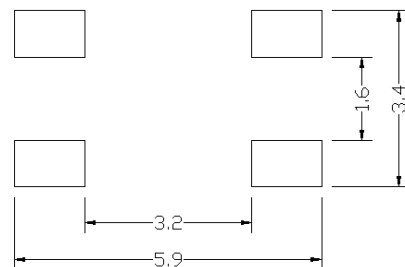
- Dimension



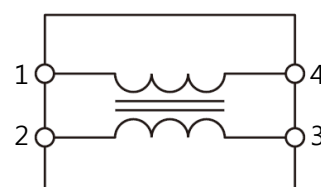
Unit : mm



- Recommended footprint



- Equivalent Circuit



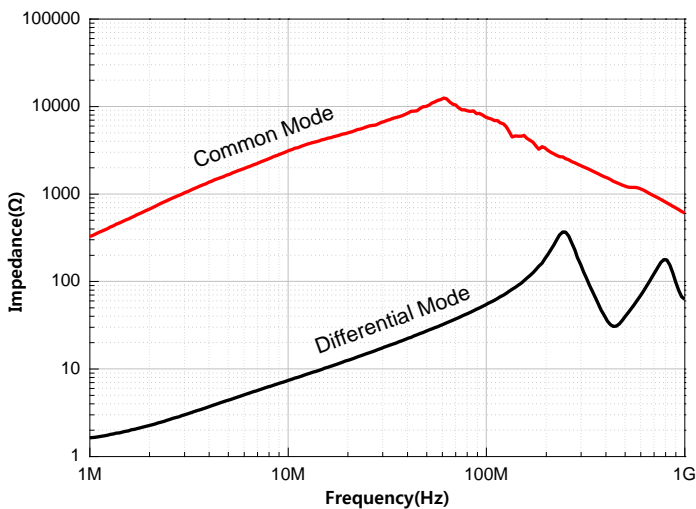
5. Specification

구분	Impedance (@10MHz)		Inductance (@100kHz)	Stray inductance (@100kHz)	DC resistance	Rated current	Insulation resistance (@50V DC)	Rated voltage
	(Ω) min.	(Ω) typ.	(μ H) +50 /-30%	(μ H) typ.	(Ω) max.	(A) max.	(M Ω) min.	(V) max.
CWA452P510	1,000	2,800	51	0.15	1.0	0.20	10	50

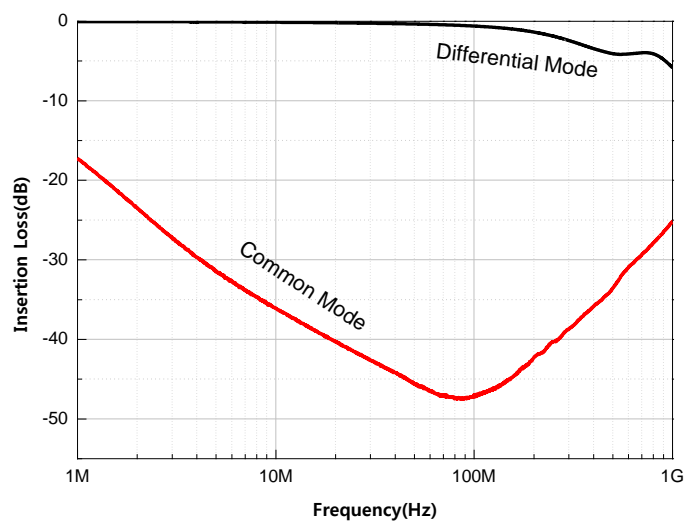
- Impedance equipment : 4991A RF Impedance/Material Analyzer. (Agilent) at 10MHz
- Inductance equipment : 4284A Precision LCR meter. (Agilent) at 100kHz, 0.1V
- DC Resistance measuring equipment : 4338B Milliohm meter. (Agilent)
- Insulation resistance equipment : 2400 Source meter. (KEITHLEY)

6. Characteristics

- Impedance Curve

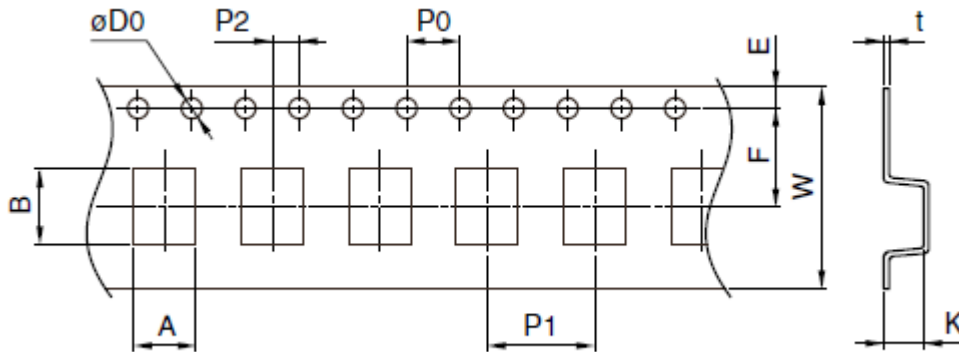


- Transmission Characteristics (S-parameter)



- Test equipment : 5071C Network Analyzer. (Agilent)
- Test Frequency : 1MHz~ 1GHz

7. Packing



Unit : mm

A	B	$\phi D0$	E	F	P0	P1	P2	W	K	T
3.6 ± 0.1	4.9 ± 0.1	1.55 ± 0.05	1.75 ± 0.1	5.5 ± 0.05	4.0 ± 0.1	8.0 ± 0.1	2.0 ± 0.05	12.0 ± 0.2	3.05 ± 0.1	0.3 ± 0.05

