

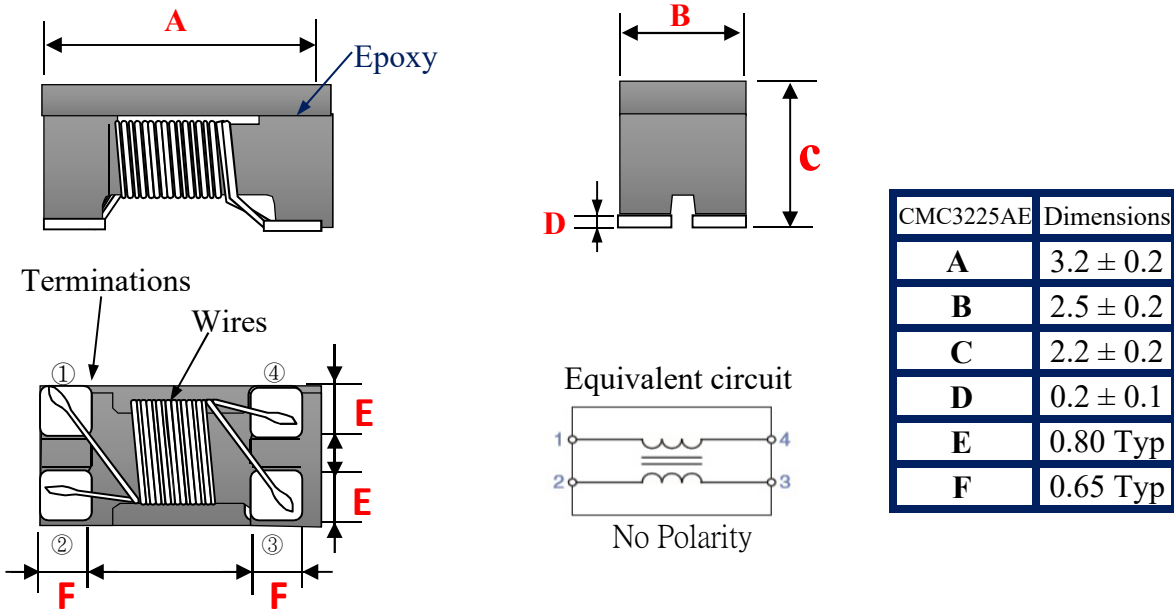
Common Mode Choke
For Automotive Ethernet

CMC AE-Series

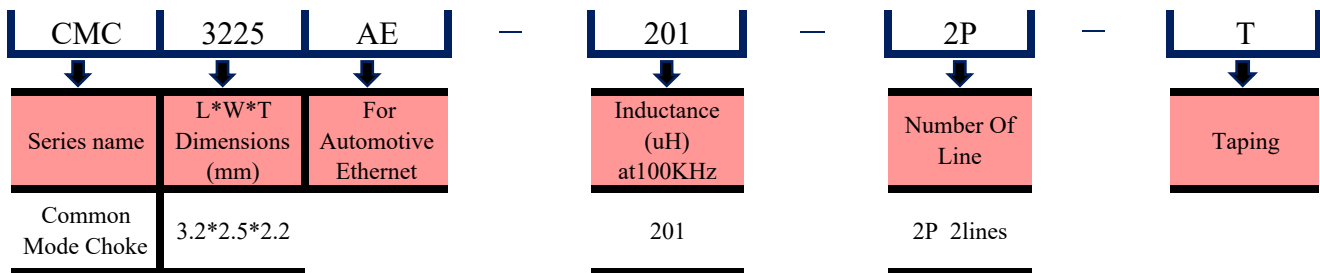
CMC3225 AE type

CMC3225 AE [1210 inch]

◆ SHAPE & DIMENSIONS



◆ PART NUMBER CONSTRUCTION



◆ OPERATING TEMPERATURE RANGE, PACKAGE QUANTITY.

Type	Temperature range		Reel Dimensions (mm)	Package quantity (pieces/reel)
	Operating Temperature °C	Storage Temperature °C		
CMC3225AE-Series	-40 to +125	-40 to +125	ø180	2000/ 1000

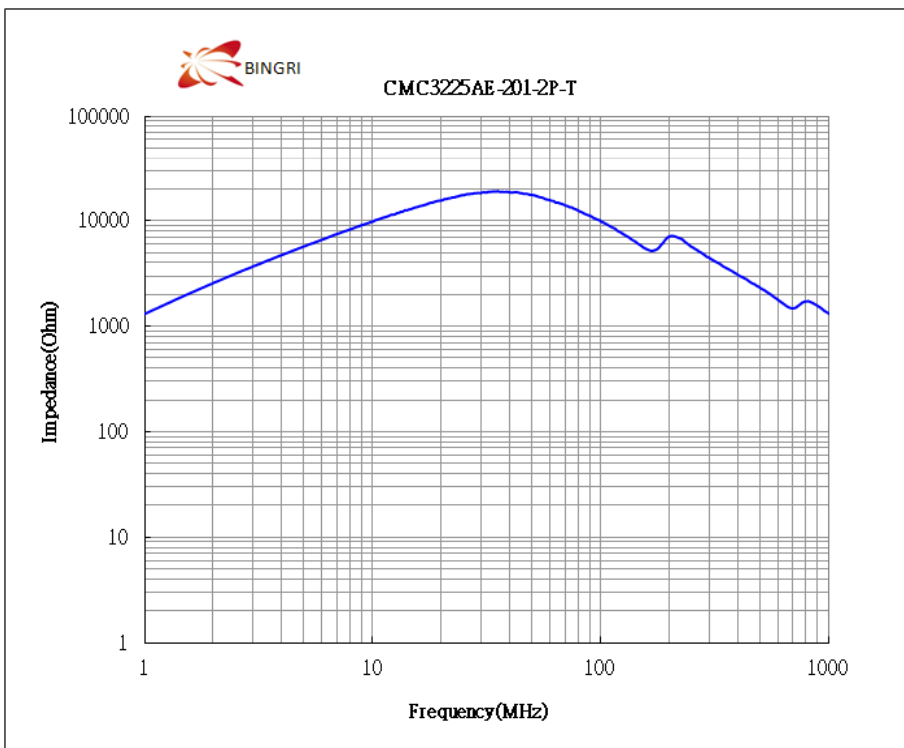
◆ ELECTRICAL CHARACTERISTICS

Impedance 【10MHz 0.1V】 (Ω)min. (Ω)typ.	Inductance 【100KHz 0.1V】 (uH)+30%/-10%	DC Resistance (Ω) max.	Rated Current (mA)max.	Insulation Resistance (MΩ)min.	Rated Voltage (V) max.	Part No.
7000 7500	200	5.5	70	10	80	CMC3225AE-201-2P-T

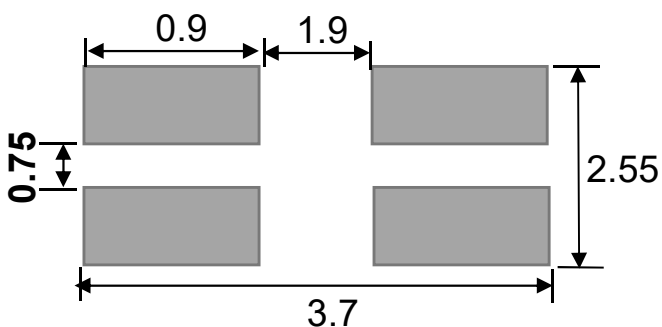
◆ Measurement

Measurement Item	Meter	Manufacturer
Common Mode Inductance	4991A	Agilent
Common Mode Impedance	E4991A / 4287A	Agilent
DC Resistance	16502	Chroma
Insulation Resistance	4339B / 19073	Agilent / Chroma

◆ PERFORMANCE CURVES



◆ Recommended Soldering Conditions (Please use this product by reflow soldering)

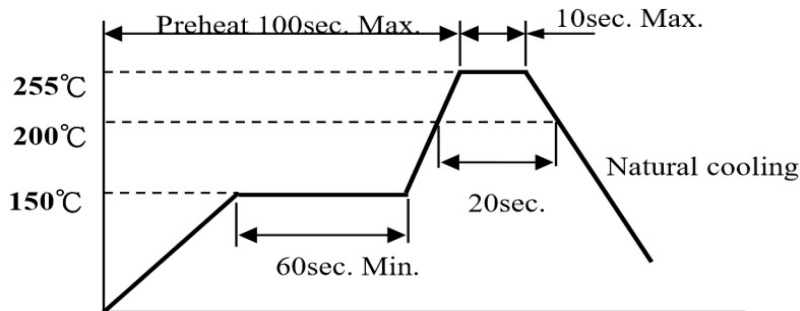


RELIABILITY



◆ RECOMMENDED REFLOW PROFILE

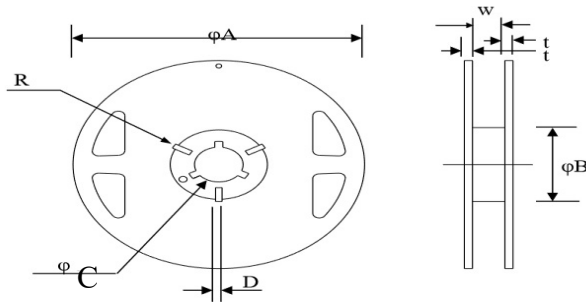
2019/10/17



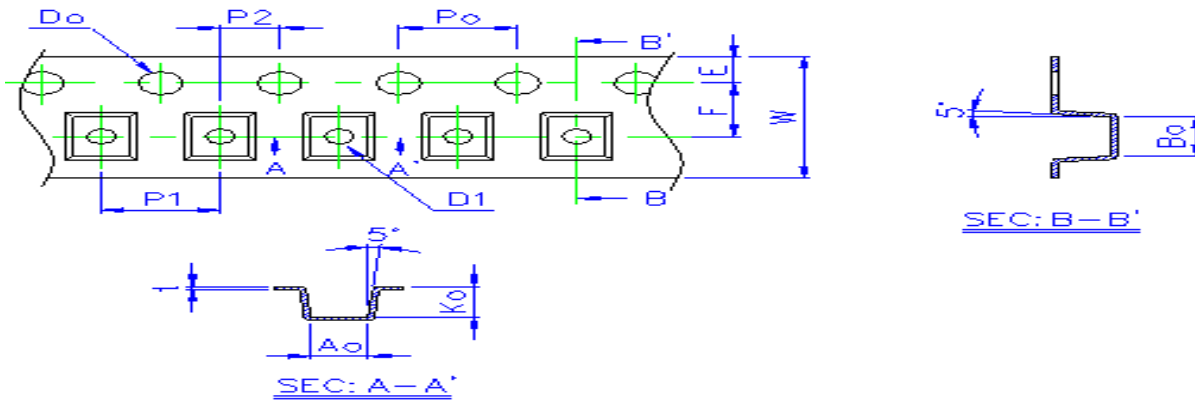
◆ MECHANICAL RELIABILITY

TEST ITEM	Specification & Requirement	Method Used
Solderability	The surface of terminal/pin tested shall be covered with new solder by 90%	Solder heat proof: Preheating: 150 ±10°C 60 seconds Soldering: 245 ±5°C for 4 ±1 sec
Solder Heat Resistance	Components should have not evidence of Impedance: within ±15% of initial value	Preheating: 150°C 60secs Flux: rosin Dip time: 10±0.5 secs
Terminal strength	Series No.	F (Kg)
	2012	0.5
	2520	1.0
	3216	1.0
	3225	1.0
	4532	1.2
ENDURANCE RELIABILITY		
Thermal Shock	Impedance change within ± 15% Without mechanical damage	-65°C, (30 mins) -> room temp. (2 mins) 125°C, (30 mins) -> room temp. (2 mins) 50 cycles
Humidity Resistance		Apply IDC current @ 60°C ambient Humidity: 90% Duration: 168 hrs
Low Temp. Storing		Storing Temp. -40 ±2 °C for total 168 +5/-0 hours
High Temp. Storing		Storing Temp. 125 ±2 °C for total 168 +5/-0 hours

◆ Reel Dimension & Tape Dimension



Type	A(mm)	B(mm)	C(mm)	W(mm)
7"x8mm	178±1	60±0.5	13.5±0.5	9.5±0.5
7"x12mm	178±1	60±1	13.3±0.5	13.7±0.5



Size	A(mm)	Ao(mm)	B(mm)	Bo(mm)	Ko(mm)	W(mm)	E(mm)	F(mm)	Po(mm)	P1(mm)	P2(mm)	Do(mm)	D1(mm)
3225	77	2.88±0.1	500	3.65±0.1	2.50±0.1	8.00±0.1	1.75±0.1	3.50±0.05	4.00±0.1	4.00±0.1	2.00±0.05	1.50+0.1/-0	1.00±0.1

◆ Cover Tape Peel Strength

The force for tearing off cover tape is 0.05~0.69(N) in the arrow direction at the following conditions:

Temperature : 5 ~ 35°C

Humidity : 45 ~ 85%

Atmospheric pressure : 860 ~ 1060 hpa

