The history of revision change for the specification

Document	REV.	Modified date	Description
CYNVF-209-002	A0	2020.9.24	New Approval
CYNVF-209-002	A1	2021.10.08	1.Sep., 2020 ->Oct., 2021 2. Update Features Add Compatible with OPEN Alliance: IEEE 100BASE-T1 EMC Test Specification for Common Mode Chokes, Version 2.0 Remove Compatible with IEEE 100BASE-T1 EMC Specification for common mode chokes 3. Remove “Uesd for industrial field bus systens” 4.Add the coplanarity in the dimensions 5. Year code 2020 = 0 -> 2021 = 1 6. Remove Specifications common Mode Impedance 7. Remove Note 3. Test Condition:10MHz, 0.1Vrms
CYNVF-209-002	A2	2023.12.07	1. Oct., 2021 -> Dec., 2023 2. Year code 2021 = 1 -> 2023 = 3 3. Add Specifications Note5: We do not recommend the use of conformal coating, please discuss with us if you have this requirement.

Wire-wound Common Mode Choke VFE3225 Series

AEC-Q200

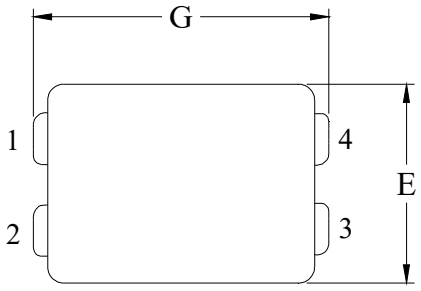
Features

Compatible with OPEN Alliance: IEEE 100BASE-T1 EMC Test Specification for Common Mode Chokes, Version 2.0
Operating temperature -40℃~125℃
Suitable for lead-free reflow soldering
Compliance with RoHS and Halogen Free
AEC-Q200 qualified

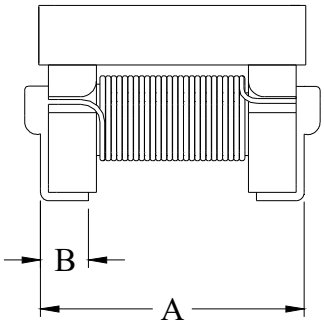
Application

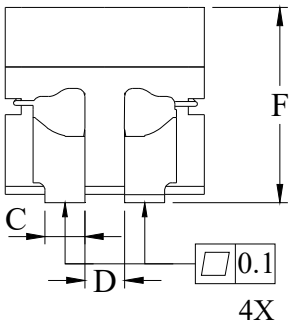
Noise suppression for automotive Ethernet system

Outline Dimensions

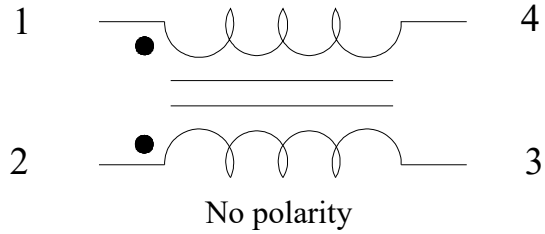


Code	Dimensions (mm)
A	3.4 Max.
B	0.6 ± 0.1
C	0.5 ± 0.1
D	0.5 ± 0.1
E	2.5 ± 0.2
F	2.6 Max.
G	4.0 Max.

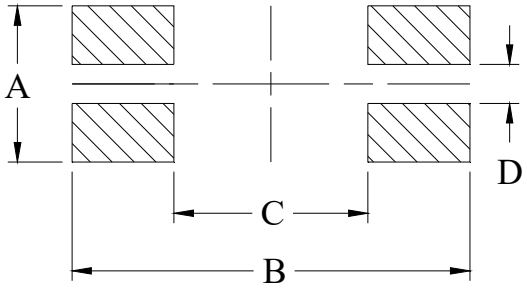




Schematic



Recommend Land Pattern Dimensions



A	1.6
B	4.1
C	2.0
D	0.4

Unit : mm

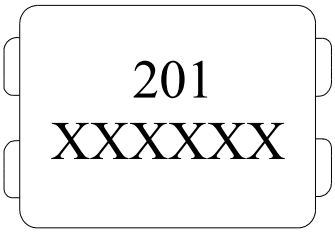
Marking and Date Code

(1) Marking

The inductor is marked with a 3-digit code

Example – – 200μH → 201

(2) Date Code



X XX XXX
(1) (2) (3)

Where (1) Year Code

Ex : 2023 = 3

(2) Weekly Code

Serial number : 01 ~ 53

(3) Taping No.

Serial number : 001 ~ ZZZ

Specifications

Part Number	Common Mode Inductance (μH) Note2 ◇	DCR (Ω) ◇	Rated Current (mA)	Rated Voltage (Vdc)	Insulation Resistance (MΩ)
		Max.	Max.	Max.	Min.
VFE3225-201	200	5.5	70	80	10

◇：Significant Characteristic

*Inductance Tolerance ：-10% / +30%

Note 1.： All test data is referenced to 25℃ ambient.

Note 2.： Test Condition:100KHz, 0.1Vrms

Note 3.： Operating Temperature Range -40℃ to +125℃

Note 4.： Cleaning Process Note

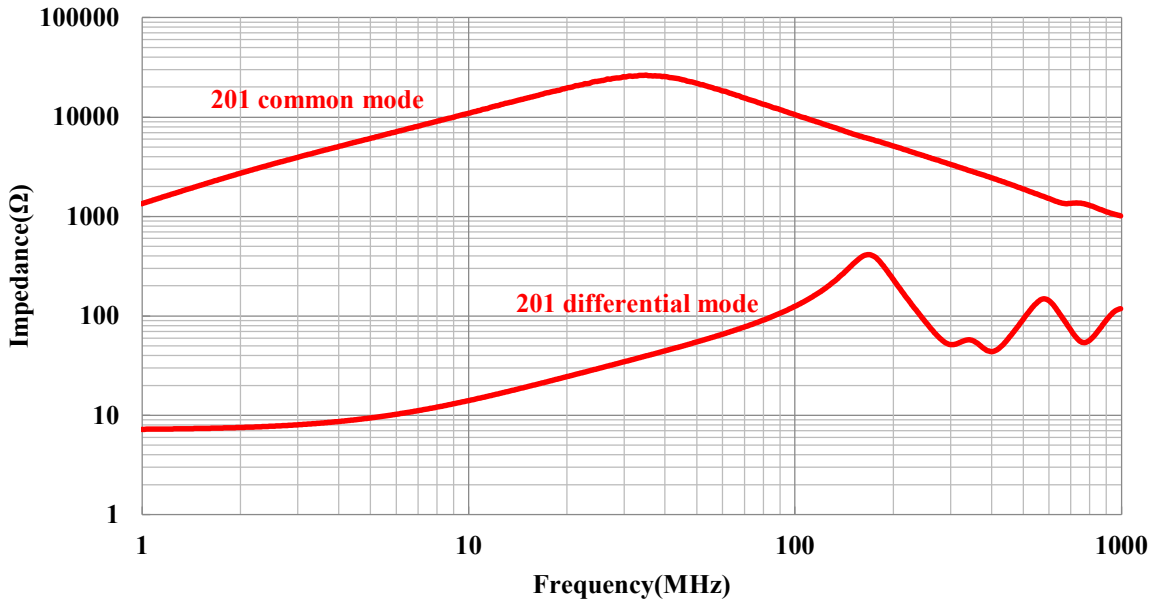
(a) If this power choke is dipped in the cleaning agent, such as toluene, xylene, ketone, and ether system, there is a possibility that the performance decreases greatly

(b) The high power ultrasonic washing may damage the choke body.

(c) Please contact us if you need the cleaning via the above agents or ultrasonic washing.

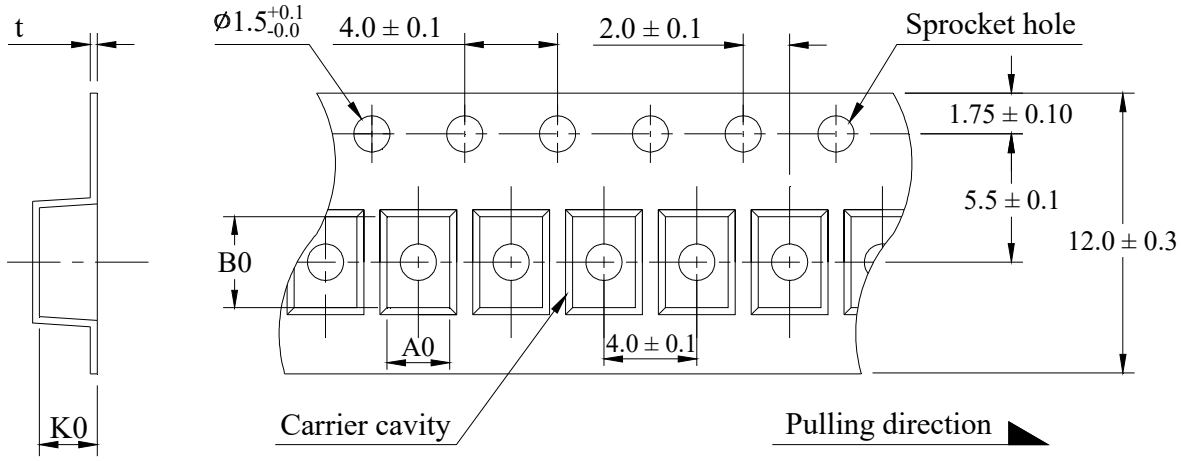
Note 5.： We do not recommend the use of conformal coating, please discuss with us if you have this requirement.

Impedance VS. Frequency Characteristic



Packaging

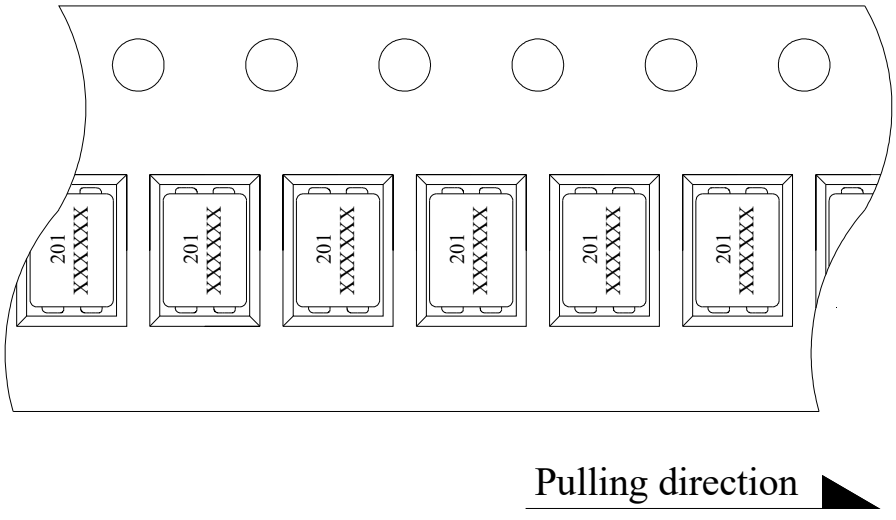
(1) Tape packaging dimensions



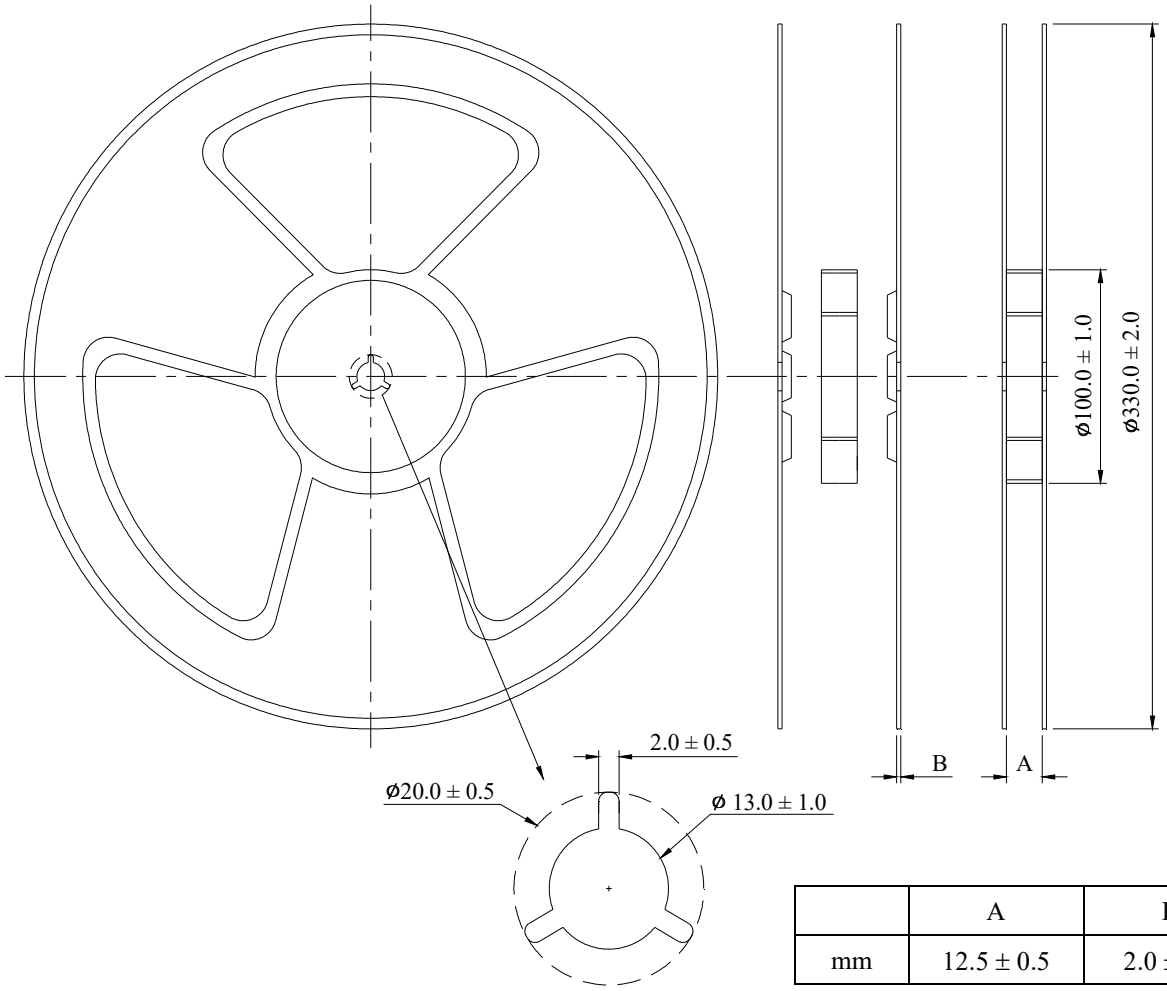
Dimensions Code (mm)				UNITS/REEL
A0	**B0**	**K0**	**t**	
2.7 ± 0.1	3.9 ± 0.1	2.8 ± 0.1	0.35 ± 0.10	5,000

(2) Tape direction

The direction shall be seen from the top cover tape side.



(3) Reel dimensions

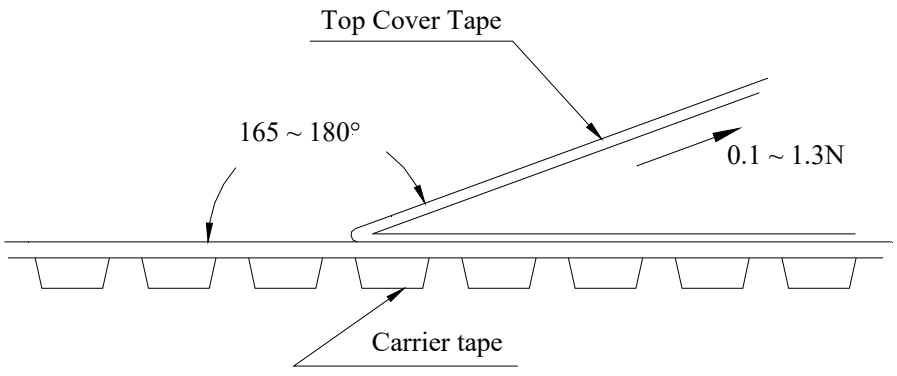


	A	B
mm	12.5 ± 0.5	2.0 ± 0.2

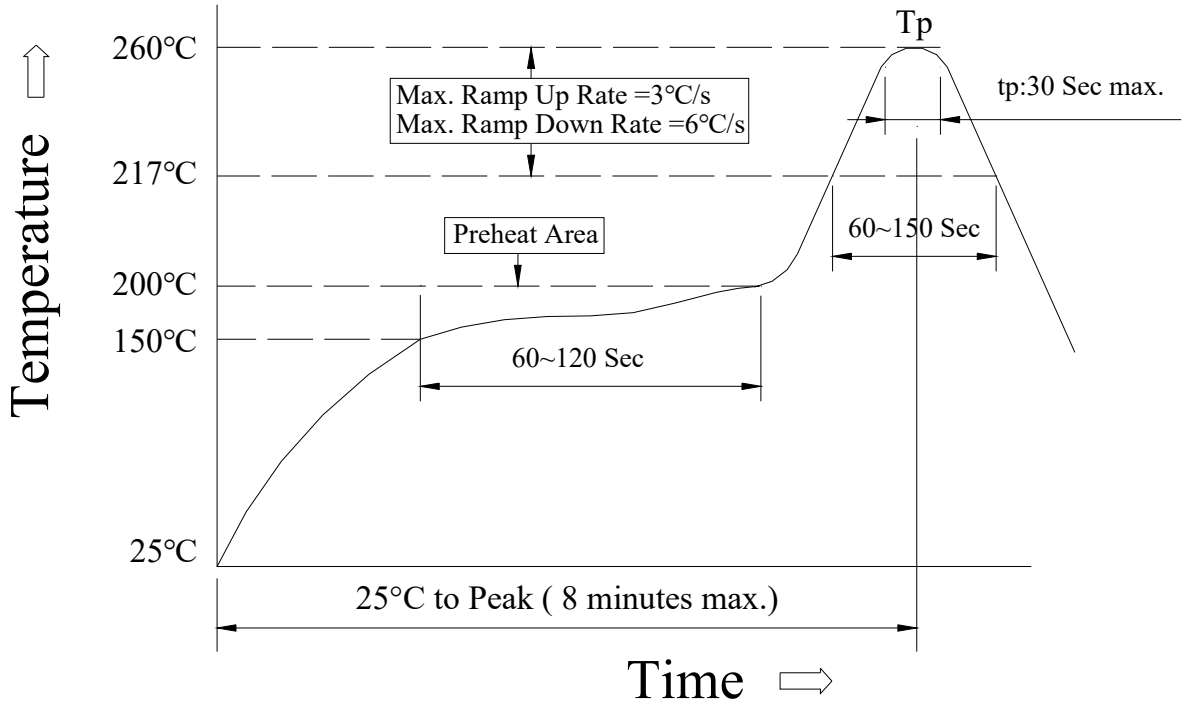
(4) Peel force of top cover tape

The peel speed shall be about 300 mm/minute.

The peel force of top cover tape shall be between 0.1 to 1.3N.



Reflow profile



(1) Reflow Soldering Method :

Reflow Soldering	Tp:255~260°C	Max.30 seconds (tp)
	≧217°C	60~150 seconds
Pre-Heat	150 ~ 200°C	60~120 seconds
Time 25°C to peak temperature	8 minutes max.	

(2) Soldering iron Method : 350 ± 5°C max.3 seconds