

Wire-wound Common Mode Choke VFB4532 Series

AEC-Q200

■ Features

Operating temperature $-40^{\circ}\text{C} \sim 150^{\circ}\text{C}$
 Suitable for lead-free reflow soldering
 Compliance with RoHS and Halogen Free
 Bifilar winding
 AEC-Q200 qualified

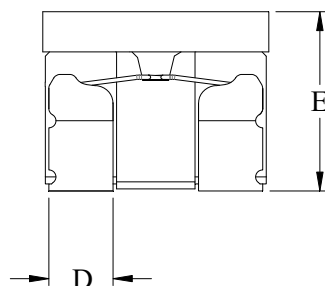
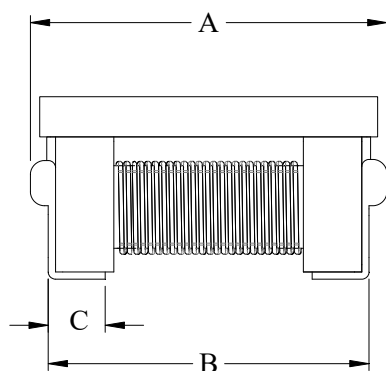
■ Application

Used radiation noise suppression for automotive CAN-BUS / Flex Ray systems
 Used for Industrial field bus systems

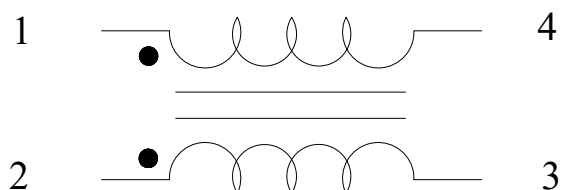
■ Outline Dimensions



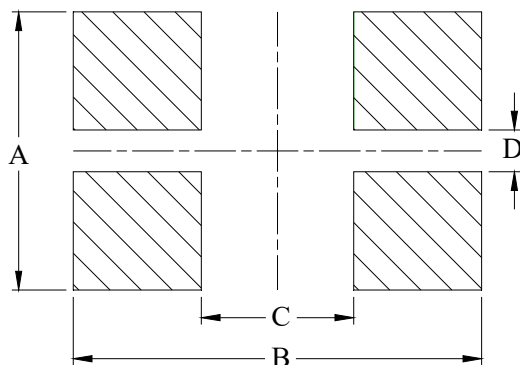
Code	Dimensions (mm)
A	5.2 Max
B	4.5 ± 0.2
C	0.8 ± 0.2
D	0.9 ± 0.2
E	2.6 ± 0.2
F	3.2 ± 0.2



■ Schematic



Recommend Land Pattern Dimensions



A	4.0
B	5.9
C	2.2
D	0.6

Unit : mm

Marking and Date Code

Marking

The inductor is marked with a 3-digit code

Example -- 51.0 μ H → 510

Date Code

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

Where (1) Year Code

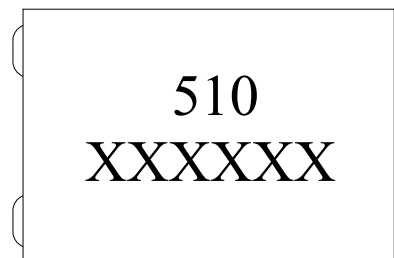
Ex : 2019 = 9

(2) Weekly Code

Serial number : 01 ~ 53

(3) Taping No.

Serial number : 001 ~ ZZZ



■ Specifications

Part Number	Common Mode Inductance (μH) Note2 ◇	Stray Inductance (μH) Note2	Common Mode Impedance (Ω) Note3		DCR (Ω) ◇	Rated current (mA)	Rated voltage (Vdc)	Insulation Resistance (MΩ)
		Typ.	Min.	Typ.	Max.	Max.	Max.	Min.
VFB4532-510	51.0	0.14	1000	3000	1.0	200	80	10
VFB4532-101	100.0	0.18	2000	6000	2.0	150	80	10

◇ : Significant Characteristic

*Inductance Tolerance : -30% / +50%

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

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

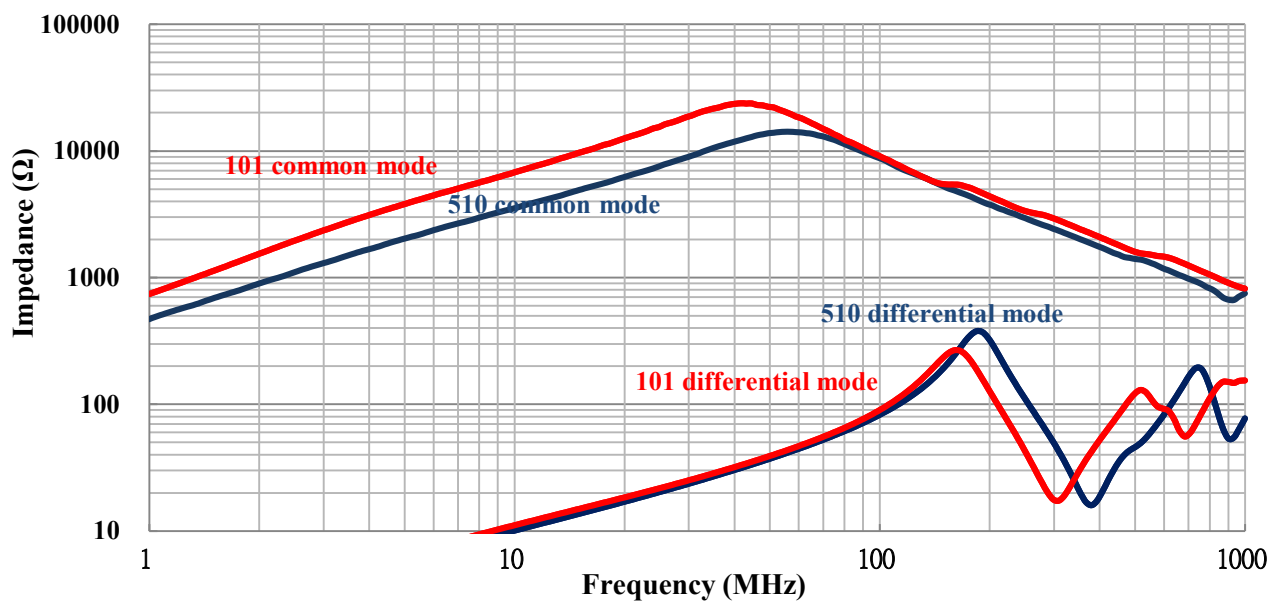
Note 3. : Test Condition:10MHz, 0.1Vrms

Note 4. : Operating Temperature Range -40°C to + 150°C

Note 5. : Cleaning Process Note

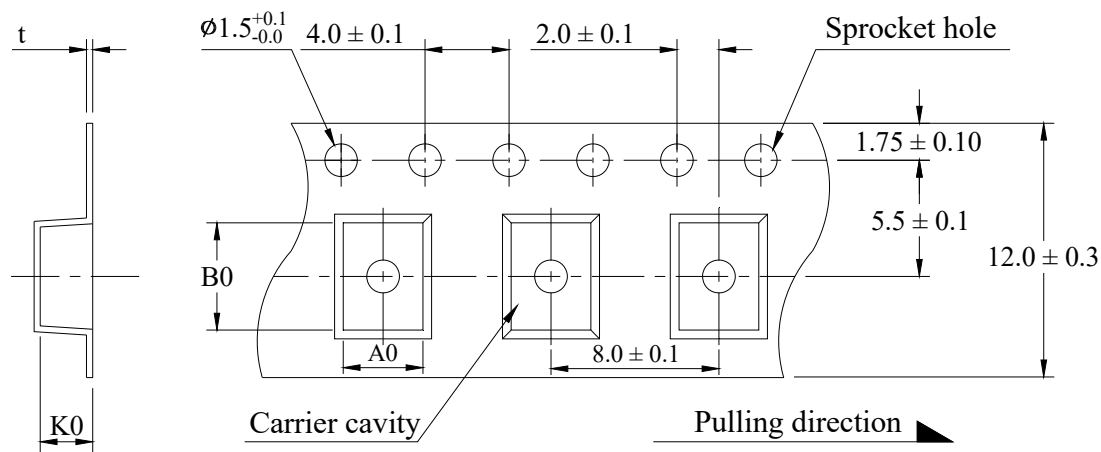
- If this power choke is dipped in the cleaning agent, such as toluene, xylene, ketone, and ether system, there is a possibility that the performance decreases greatly
- The high power ultrasonic washing may damage the choke body.
- Please contact us if you need the cleaning via the above agents or ultrasonic washing.

■ Impedance VS. Frequency Characteristic



Packaging

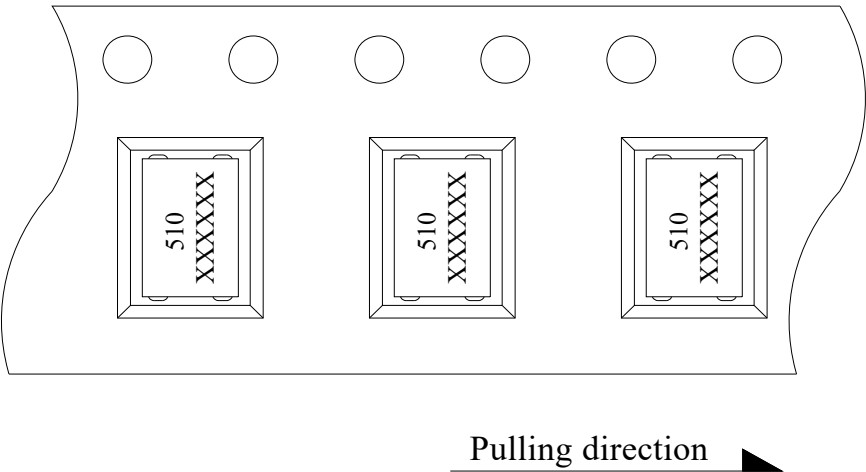
(1) Tape packaging dimensions



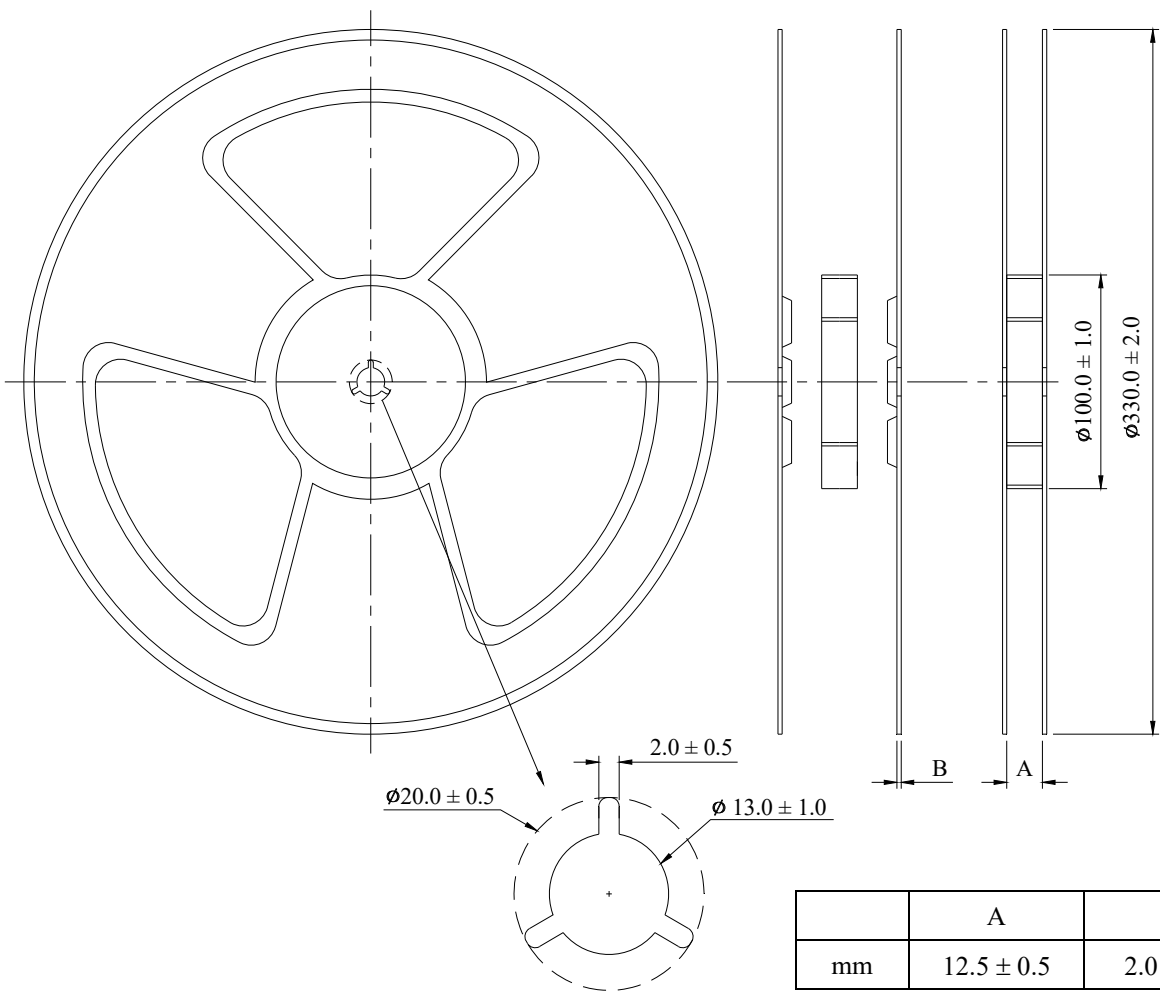
Dimensions Code (mm)				UNITS/REEL
A0	B0	K0	t	
3.5 ± 0.1	5.1 ± 0.1	3.1 ± 0.1	0.40 ± 0.05	2,500

(2) Tape Direction

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

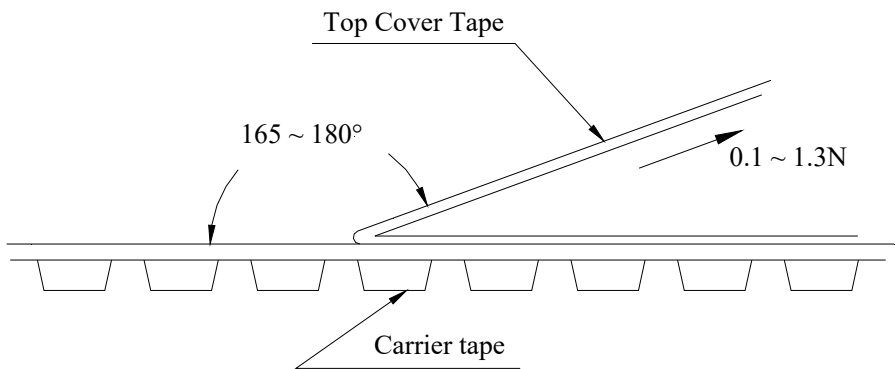


(3) Reel dimensions

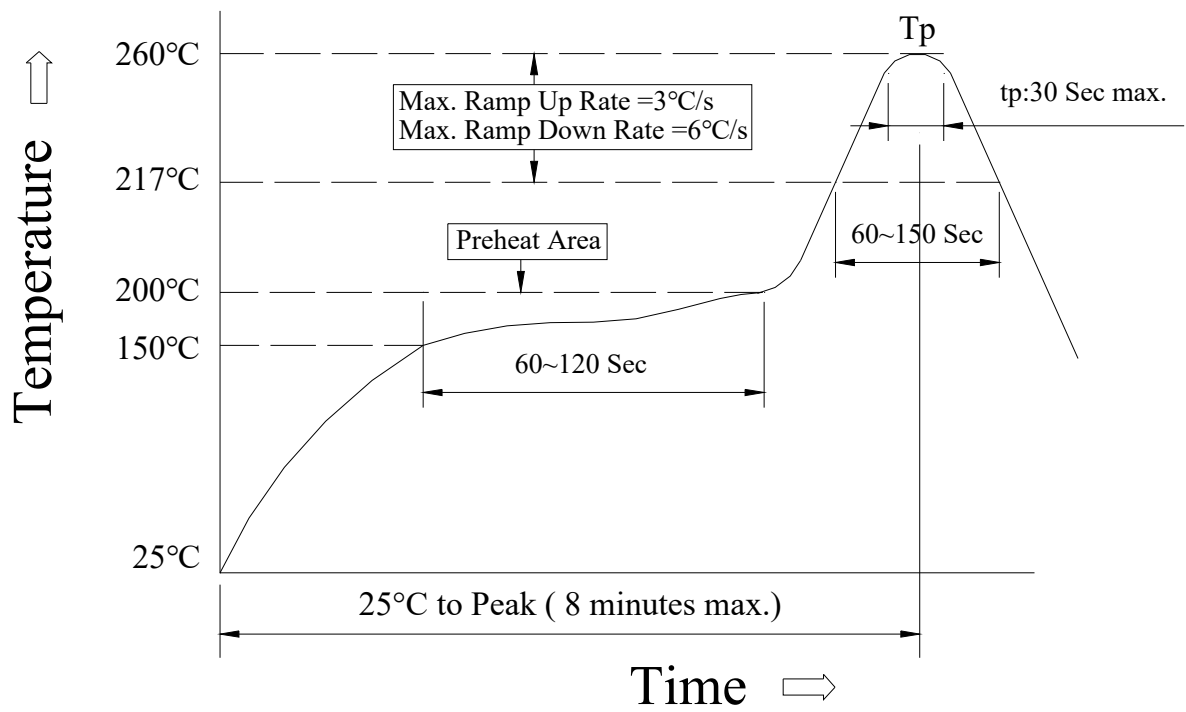


(4) Peel force of top cover tape

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