

PRODUCT SPECIFICATION

新弘智

SPEC. NO: T-0602-154D

DATE: Aug.7,2018

CUSTOMER'S PRODUCT NAME:

EMTEK PRODUCT NAME:

CMF4532L-Series

THIS SPECIFICATION IS:

- FULLY ACCEPTED
 DENIED
 ACCEPTED UNDER THE FOLLOWING CONDITIONS



SIGNATURE: _____ DATE: _____

NAME(PRINT): _____

TITLE: _____



EMTEK CO., LTD.

FACTORY:

39,Chingao Rd.,(305)Hsinpu,
Hsinchu Hsien,Taiwan,R.O.C

TEL: 03-5894-433

FAX: 03-5894-523

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1. Scope

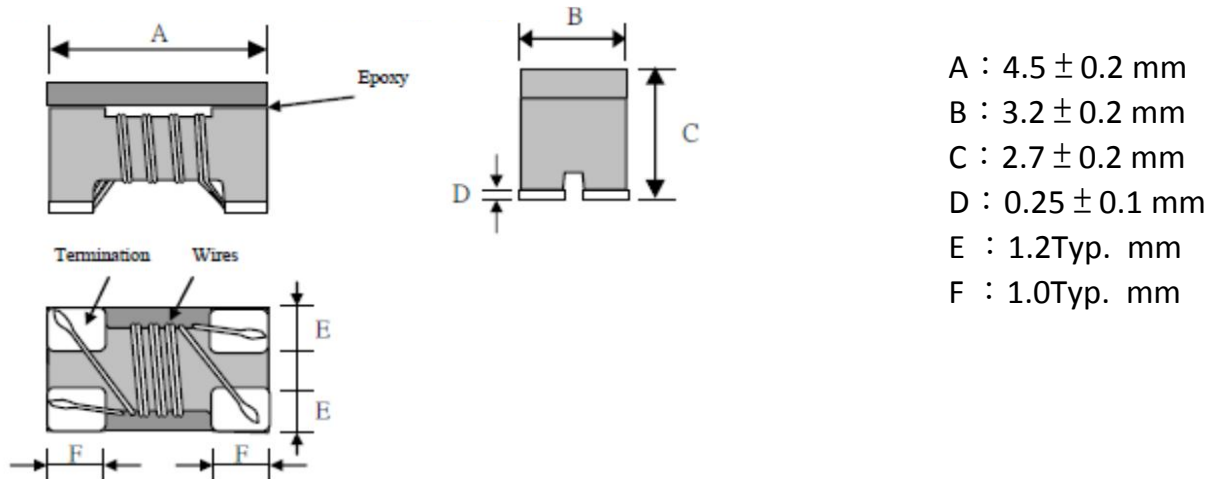
This specification applies ferrite Chip common mode filters CMF4532L-Series to be delivered to user.

2. Product Identification

CMF 4532 L - 101 - 2P - T
 (1) (2) (3) (4) (5) (6)

- (1) Product name
- (2) Shapes and dimensions
- (3) Application
- (4) Inductance 【 at 100KHz 】
101:100 (uH)
- (5) Number of Line
2P:2-Line
- (6) For Customer Design

3. Shapes and Dimensions [Dimensions in mm]



A : 4.5 ± 0.2 mm
 B : 3.2 ± 0.2 mm
 C : 2.7 ± 0.2 mm
 D : 0.25 ± 0.1 mm
 E : 1.2Typ. mm
 F : 1.0Typ. mm

Drawn by	Checked by	Approved by
Cindy Jun. 21. 2018	Zhengy Jun. 21/2018	Sun Jun. 21. 2018

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4. Electrical Characteristics

4-1 Electrical Spec.

Our Product Part Number	Z(Ω) Common Mode Impedance at 10MHz		L(μ H) Common Mode Inductance at 100KHz	DCR(Ω) Max.	Idc(mA) Max.	Rated Voltage Vdc (V)Typ.	Insulation Resistance IR (M Ω)Min.
	min.	typ.	(+50%/-30%)				
CMF4532L-1R0-2P-T	min.	50	(+50%/-30%)	0.12	1200	50	10
	typ.	60	1				
CMF4532L-110-2P-T	min.	300	(+50%/-30%)	0.6	250	50	10
	typ.	600	11				
CMF4532L-220-2P-T	min.	500	(+50%/-30%)	1.0	200	50	10
	typ.	1200	22				
CMF4532L-510-2P-T	min.	1000	(+50%/-30%)	1.0	200	50	10
	typ.	2800	51				
CMF4532L-101-2P-T	min.	2000	(+50%/-30%)	2.0	150	50	10
	typ.	5800	100				
CMF4532L-201-2P-T	min.	/	(+50%/-30%)	4.5	100	50	10
	typ.	/	200				

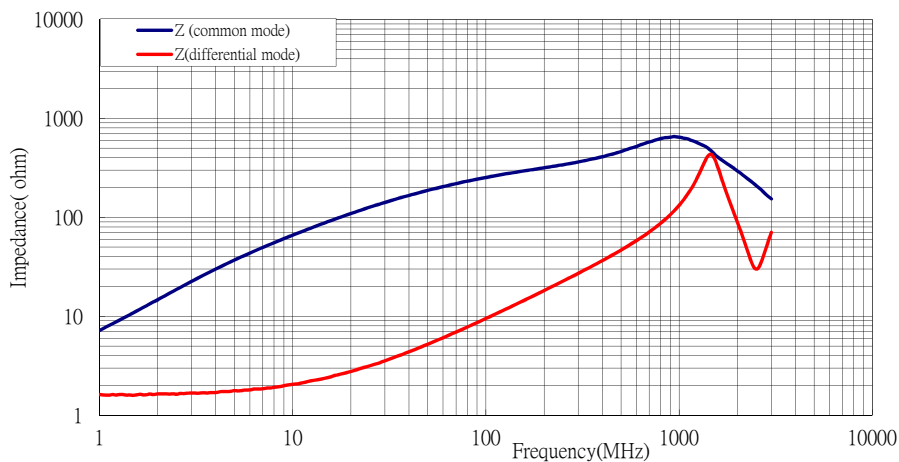
Operating temperature : -40 to 125°C

Storage temp. and humidity : -40 to +85°C , 70%RH max

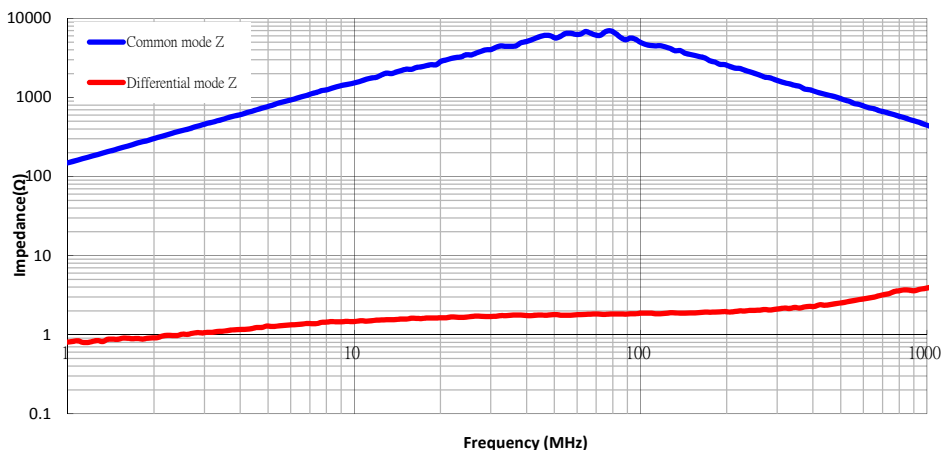
4-2 Characteristics(Reference)

4-2-1 Z v.s. Freq.

CMF4532L-1R0-2P-T



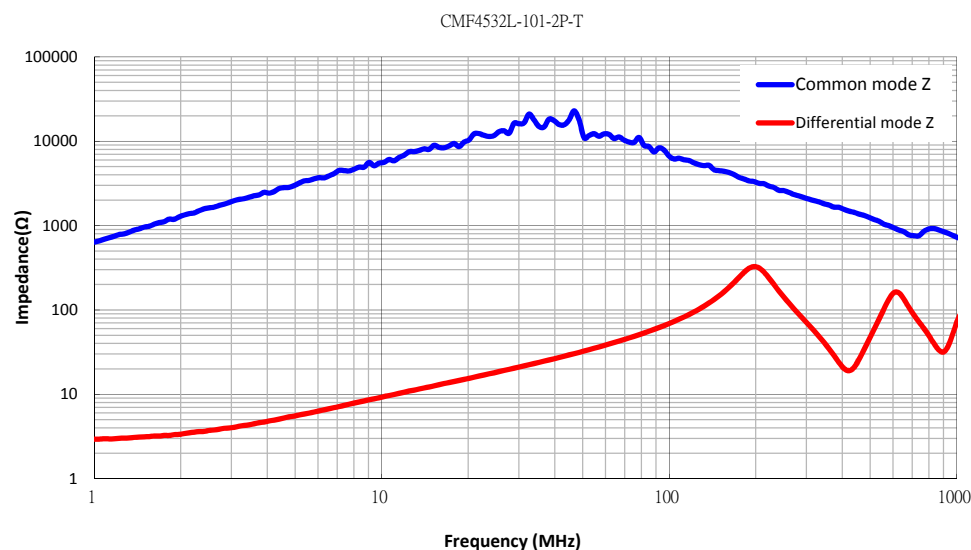
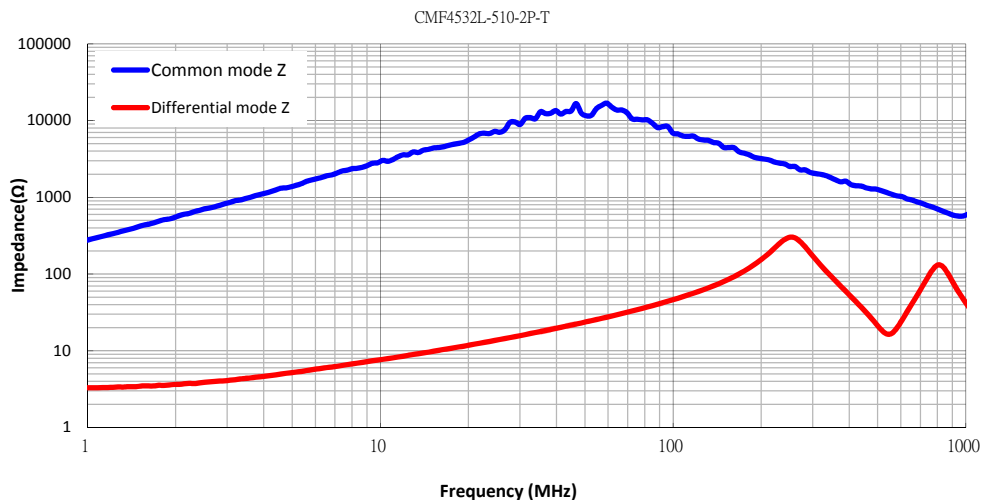
CMF4532L-220-2P-T





4-2 Characteristics(Reference)

4-2-1 Z v.s. Freq.



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SPEC. NO.

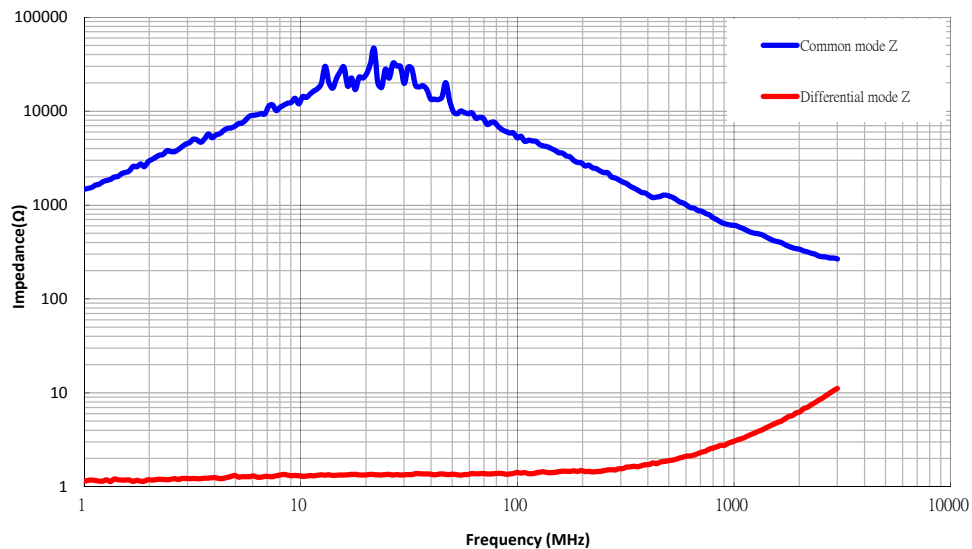
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4-2 Characteristics(Reference)

4-2-1 Z v.s. Freq.

CMF4532L-201-2P-T



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SPEC. NO.

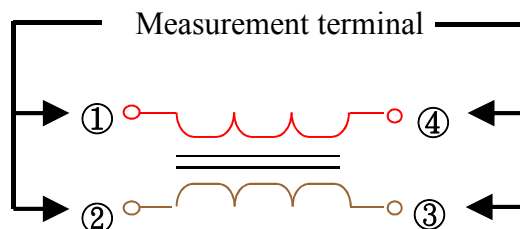
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4-3 Test Equipment

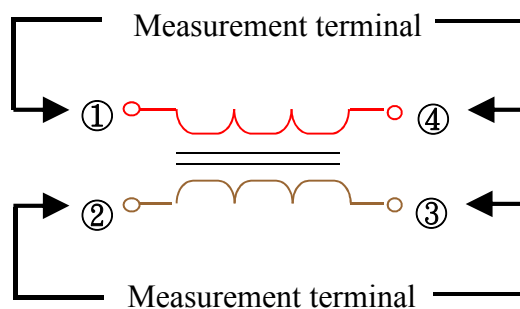
4-3-1 Inductance

Measured by using Agilent HP4284A Precision LCR Meter.



4-3-2 DC Resistance

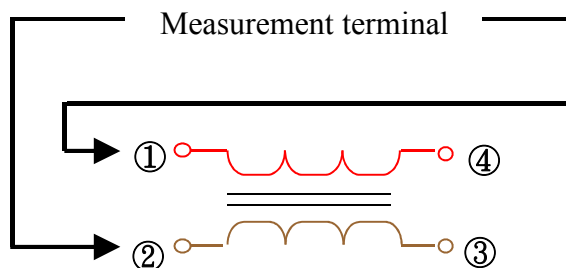
Measured by using Chroma 16502 mill ohm meter.



4-3-3 Insulation Resistance

Measured by using Chroma 19073

Measurement voltage : 50v ,Measurement time : 60 sec.

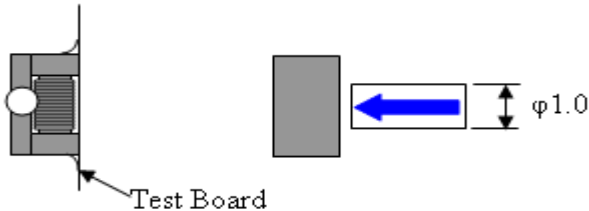
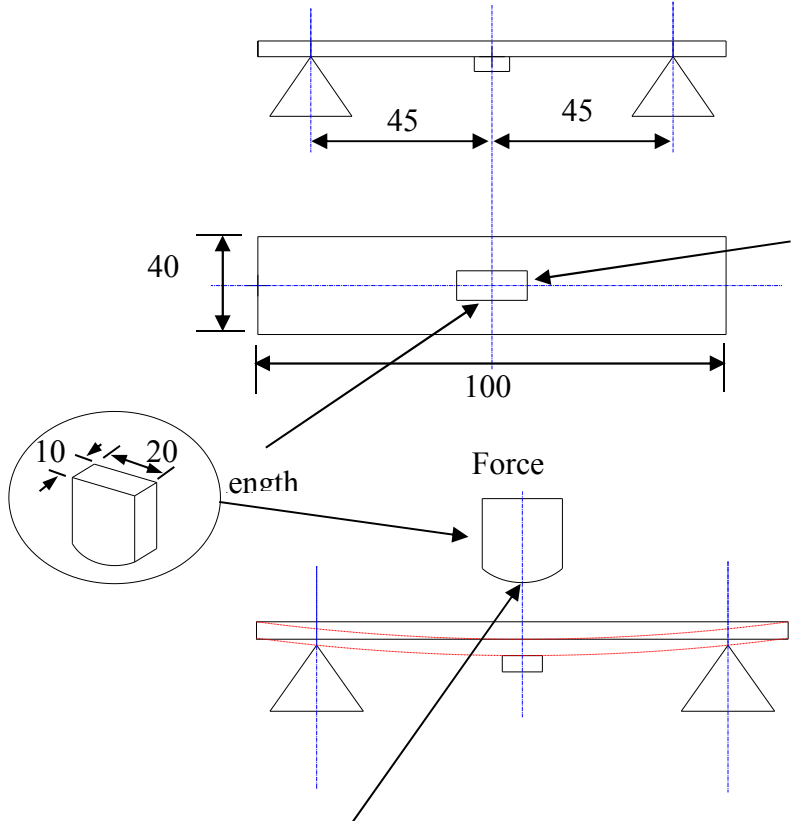


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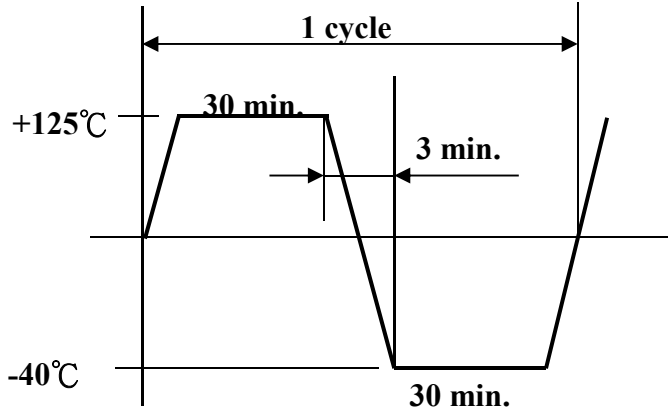
5. Reliability Test

Operating temperature : -40 to +125°C		Storage temp and humidity : 20~25°C ,60%RH max.
Item	Specifications	Test conditions
Solder ability	It can be connected on the Recommendation soldering condition	Apply cream solder to the test circuit board . It is mounted on the recommendation soldering condition. Dip pads in flux and dip in solder pot(96.5 Sn/3.5 Ag solder) at 255°C ±5°C.
Terminal strength	The terminal electrode and the ferrite must not be damaged.	Solder a chip to test substrate , and then laterally apply a load 1.8Kg in the arrow direction. 
Strength on pc board bending	The terminal electrode and the ferrite must not be damaged.	Soldering a chip to a test substrate , bend the substrate by 2mm and then return.  Dimensions in mm R10 Test board : Glass base epoxy multiplayer board pc board pattern. PC board pattern : Recommended PC board pattern.

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Item	Specifications	Test conditions
High temperature resistance	Appearance : Ferrite shall not be damaged. initial value. insulation resistance: >10(MΩ) DC resistance : standard value	Temperature : +125±2°C Applied voltage : Rated voltage Applied current : Rated current Testing time : 500±12 hours Measurement : After placing for 24 hours min.
Humidity resistance	inside.	Temperature : +85±2°C Humidity : 90 to 95%RH Applied current : Rated current Applied voltage : Rated voltage Testing time : 500±12 hours Measurement : After placing for 24 hours min.
Thermal shock		Temperature : -40°C ,+125°C kept stabilized for 30 minutes each. Cycle : 100 cycle Measurement : After placing for 24 hours min. 
Low temperature resistance		Temperature : -40±2°C Testing time : 500±12 hours Measurement : After placing for 24 hours min.
Vibration	Appearance : Ferrite shall not be damaged.	Frequency : 10 to 50 Hz Amplitude : 1.52 mm Dimension and times : X ,Y and Z directions for 2 hours each.

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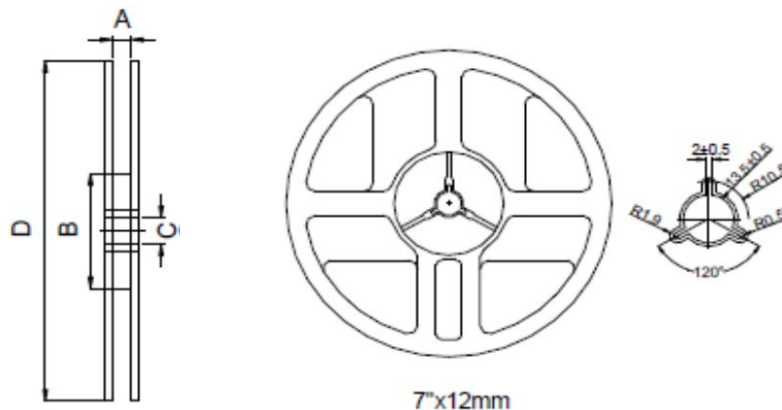
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6. Reel Dimension & Tape Dimension

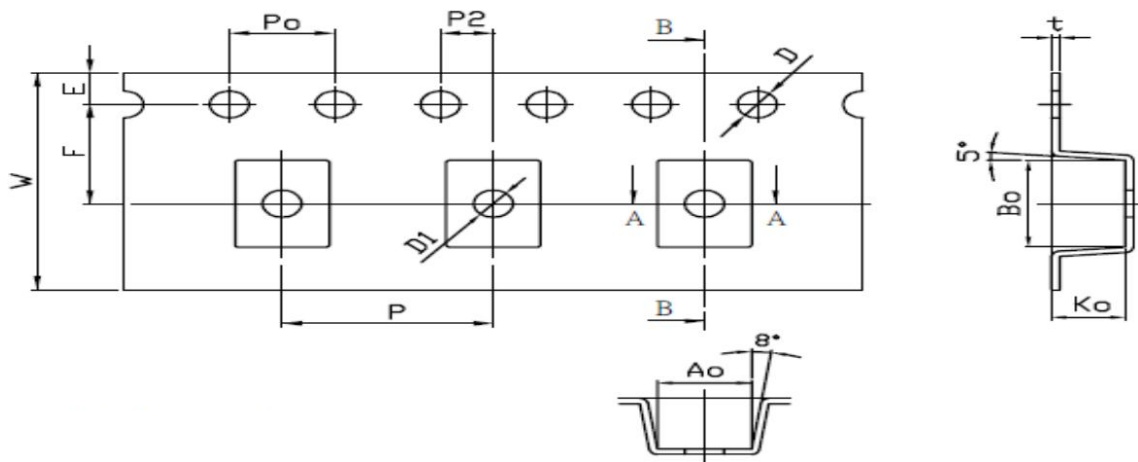
6-1 Reel Dimensions



Unit: mm

A	B	C	D
13.2±0.5	60±2	13±0.5	180±2

6-2 Tape Dimensions



Symbol	W	P	E	F	P2	D	D1	Po	10Po
Dimension	12.00	8.00	1.75	5.50	2.00	1.50	1.50	4.00	40.00
SPEC.	±0.1	±0.1	±0.1	±0.05	±0.05	+0.10 -0.00	±0.1	±0.1	±0.2
Symbol	Ao	Bo	Ko	t					
Dimension	3.57	4.80	2.80	0.30					
SPEC.	±0.1	±0.1	±0.1	±0.05					

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6-3 Packaging Quantity

500pcs/reel

7. Equivalent Circuit & Recommended Footprint

