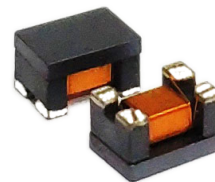


## Common Mode Filters

For automobile signal line



### FEATURE

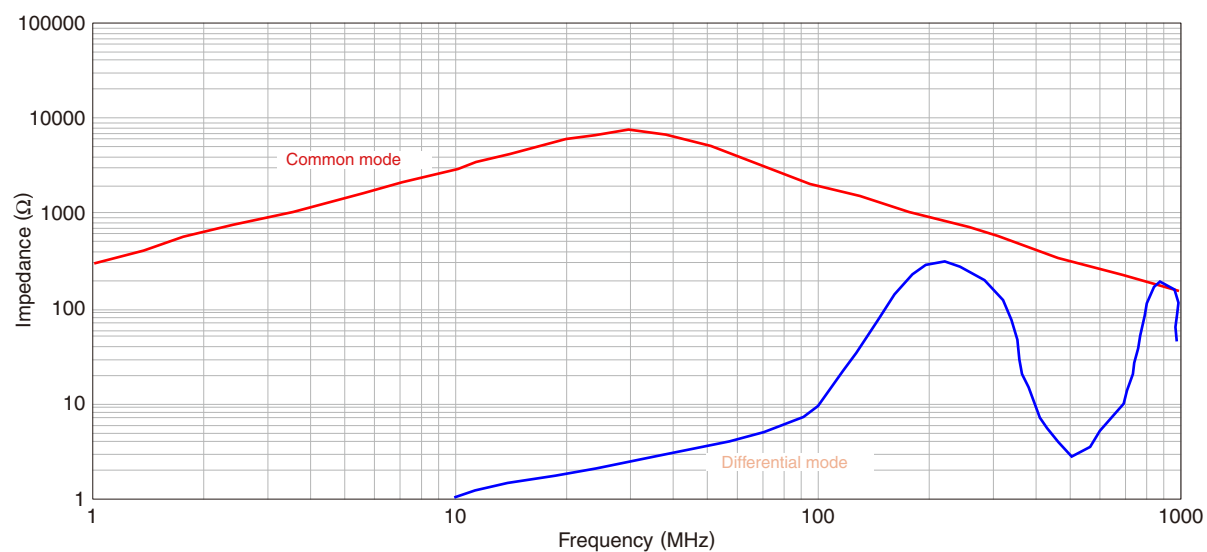
- Compatible with an operating temperature range of  $-40$  to  $+105^{\circ}\text{C}$ , so can be used for vehicle devices requiring compatibility with high temperatures.
- When mounting, the terminal and winding tape splicing part do not fuse.
- Which uses our unique technology, is a product that can achieve  $\text{DCR} < 2\Omega$  @  $125^{\circ}\text{C}$  by reducing the DC resistance while maintaining a high L-value of  $51\mu\text{H}$ .

### APPLICATIONS

- FlexRay system.

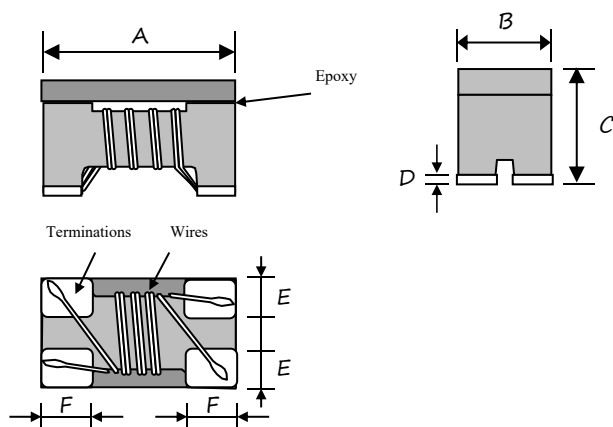
STANDARD ELECTRICAL SPECIFICATIONS					
PART NUMBER	Common mode inductance [100kHz] ( $\mu\text{H}$ )+50/-30%	Rated voltage (V)max.	Rated current (mA)max.	DC resistance ( $\Omega$ )max.	Insulation resistance (M $\Omega$ )min.
CMF2SMFWI510M	51	50	200	1.0	10

## PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



## DIMENSIONS in inches [millimeters]

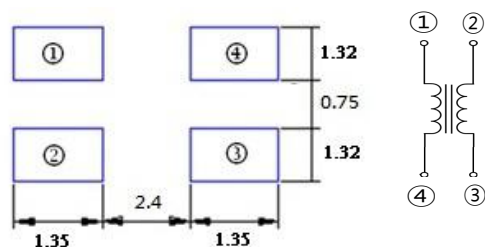
### 2.Dimension



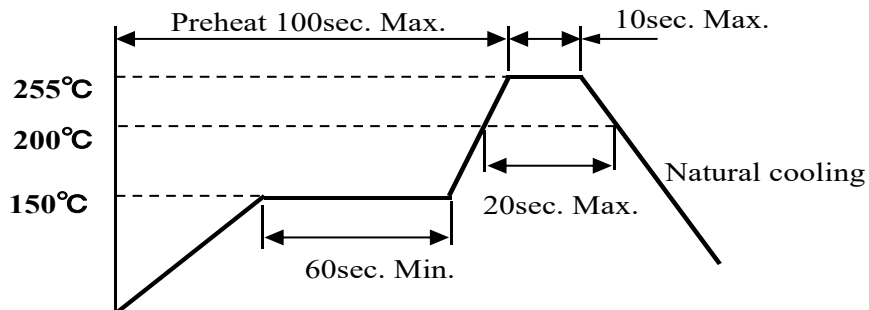
4532	Dimensions
A	$4.5 \pm 0.2$
B	$3.2 \pm 0.2$
C	$2.8 \pm 0.2$
D	$0.2 \pm 0.1$
E	1.2Typ.
F	1.0Typ.

### Recommended Land Pattern

Unit: mm

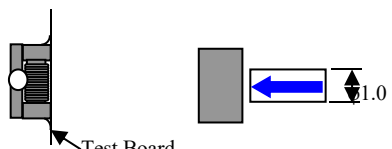


PIN NUMBER	DESCRIPTION
① ~ ④	DATA LINE
② ~ ③	DATA LINE

**RECOMMENDED SOLDERING TEMP. GRAPH**


ITEM P/N	CMF2SMFWI510M	TEST INSTRUMENT	4291B、4339B
PRODUCT	COMMON MODE CHOKE	TEST FREQUENCY	100 MHz / 0.5V

**MECHANICAL RELIABILITY**

TEST	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 electrical and mechanical damage Impedance: within ±15% of initial value		Preheating: 150°C 60secs Solder temperature: 260 ±5°C Flux: rosin Dip time: 10 ±0.5 secs
Terminal strength	Series No.	F (Kg)	Solder a chip to test substrate and then laterally apply a force in the arrow direction 
	1608	0.5	
	2012	0.5	
	3216	1.0	
	4532	1.0	