

# Common Mode Filters

## BOK6E SERIES

## PRODUCT CATALOG



寶仁弘電子有限公司 Prosperity Electronic Co., Limited

EML: brh@baorenhong.com Web: www.baorenhong.com

TEL: 0755-29687188 FAX: 0755-29688152

深圳市寶安區福永鎮立新二路天佑創客產業園

TEL: 0512-36878535 FAX: 0512-36878435

江蘇省昆山市花橋鎮綠地大道1325號

# Common Mode Filters

## ◎ Product introduction 產品介紹

- Chip common mode filter for large current applications  
耐大電流片式共模濾波器
- which are always being made smaller and lighter, because the height has been reduced.  
適應小型輕量化的便攜式設備的高密度化趨勢
- Terminal electrode has been electroplated, suitable flow soldering, reflow soldering an arbitrary welding method  
端子電極已經過電鍍，可適用流動焊接，回流焊接任意一種焊接工法

## ◎ Product application 產品應用

- Power line noise countermeasure for various electronic equipment  
應對所有電子設備電源線和噪音
- Noise countermeasure for adapterlines or larger electronic equipment such as note book PCs.  
應對筆記本電腦等較大型電子設備適配線的噪音

## ◎ Product Identification 產品標識

BOK 6E 1A90 T

BOK-----Series name 系列名稱

6E-----Dimension 產品尺寸

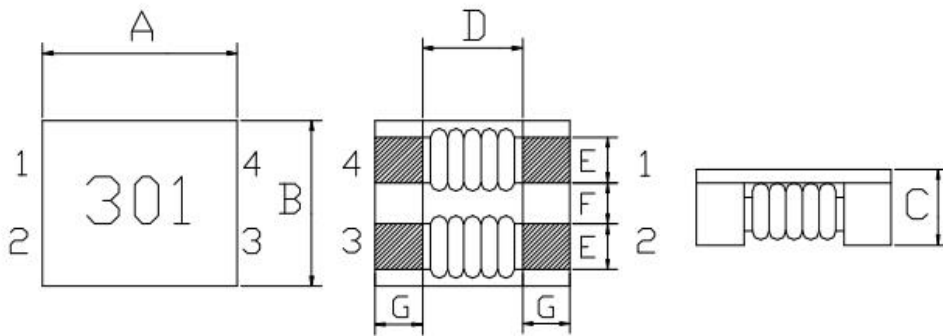
1A90-----Product parameters 產品參數

T-----Taping 編帶盤裝



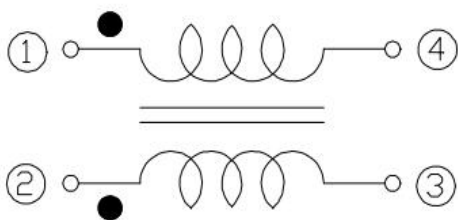
# Common Mode Filters

## ◎Shape&Dimensions 形狀與尺寸:

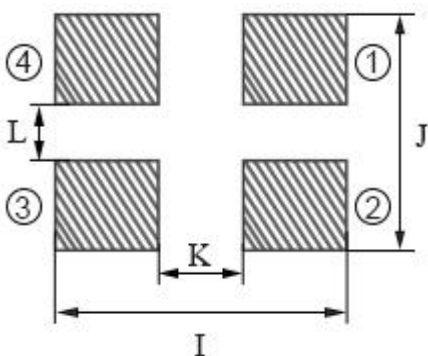


SIZE CODE	A	B	C	D	E	F	G	CHIPS REEL
BOK6E	7.0±0.5	6.0±0.5	3.8 MAX	3.5 Typ	1.5±0.2	1.5±0.2	1.75±0.2	1.5K
BOK7A	9.0±0.5	7.0±0.5	4.8 MAX	5.7 Typ	1.5 Typ	2.0 Typ	1.7 Typ	0.7K
BOK8F	12.0±0.5	10.0±0.7	6.4 MAX	7.0 Typ	2.7 Typ	2.5 Typ	2.5 Typ	0.5K

## ◎Circuit Diagram 電路圖



## ◎Recommender Land Pattern 推薦焊盤布局:



SIZE CODE	I	J	K	L
BOK6E	7.2 Typ	6.5 Typ	3.2 Typ	1.2 Typ
BOK7A	9.5 Typ	7.5 Typ	5.2 Typ	1.5 Typ
BOK8F	12.5 Typ	10.5 Typ	6.2 Typ	2.2 Typ

# Common Mode Filters

© Detailed specifications and parameters are introduced

詳細規格及參數介紹

ORDERING CORE	Impedance( $\Omega$ ) AT 100MHZ		DC Resistance ( $\Omega$ )MAX /1LINE	Rated Voltage (V)MAX	Insulation Resistance (M $\Omega$ )MIN	Rated Current (mA)MAX	Reference Inductance ( $\mu$ H)
	Min	Typ					
BOK6E-04A15T	40	70	0.005	80	10	15000	1
BOK6E-1A90T	100	140	0.010		10	9000	2.1
BOK6E-3A50T	225	300	0.010		10	5000	3.1
BOK6E-5A50T	275	350	0.010		10	5000	5.1
BOK6E-7A40T	500	700	0.015		10	4000	7.4
BOK6E-10A30T	800	1020	0.017		10	3000	8.9
BOK6E-13A25T	910	1300	0.021		10	2500	13.2
BOK6E-27A10T	2000	2700	0.063		10	1000	23.2
BOK6E-30A09T	2500	3000	0.075		10	900	24.2

Temperature:15°C to 35°C

Humidity:25% to 85% RH

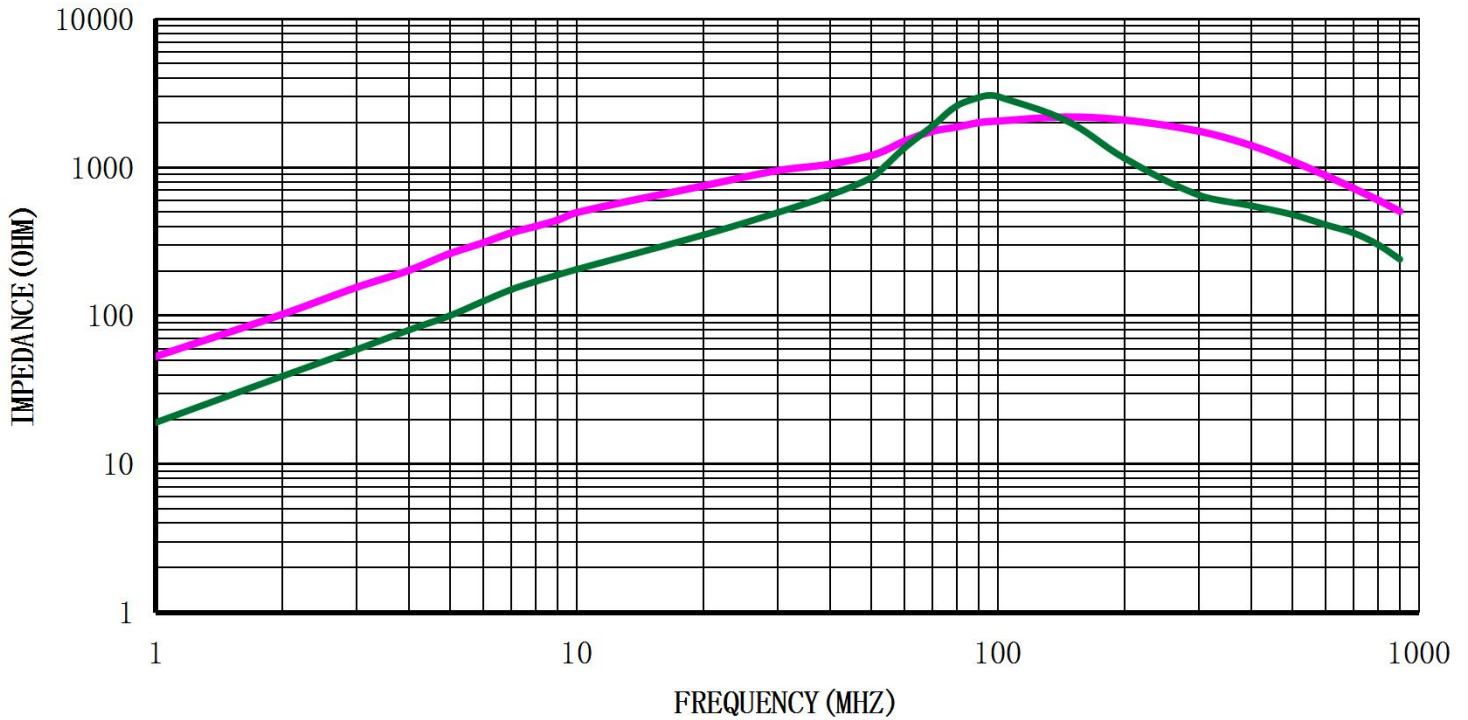
© Material List 材料清單

NO.	ITEM	DESCRIPTION	SUPPLIER
1	CORE	FERRITE	SINCORES OR EQ
2	WIRE	2UEW P180	PACIFIC OR EQ
3	INK	BLACK	BON OR EQ
4	COVER	MYLAR	SUMITOMO OR EQ
5	SOLDER	SN CU	SOLNET OR EQ

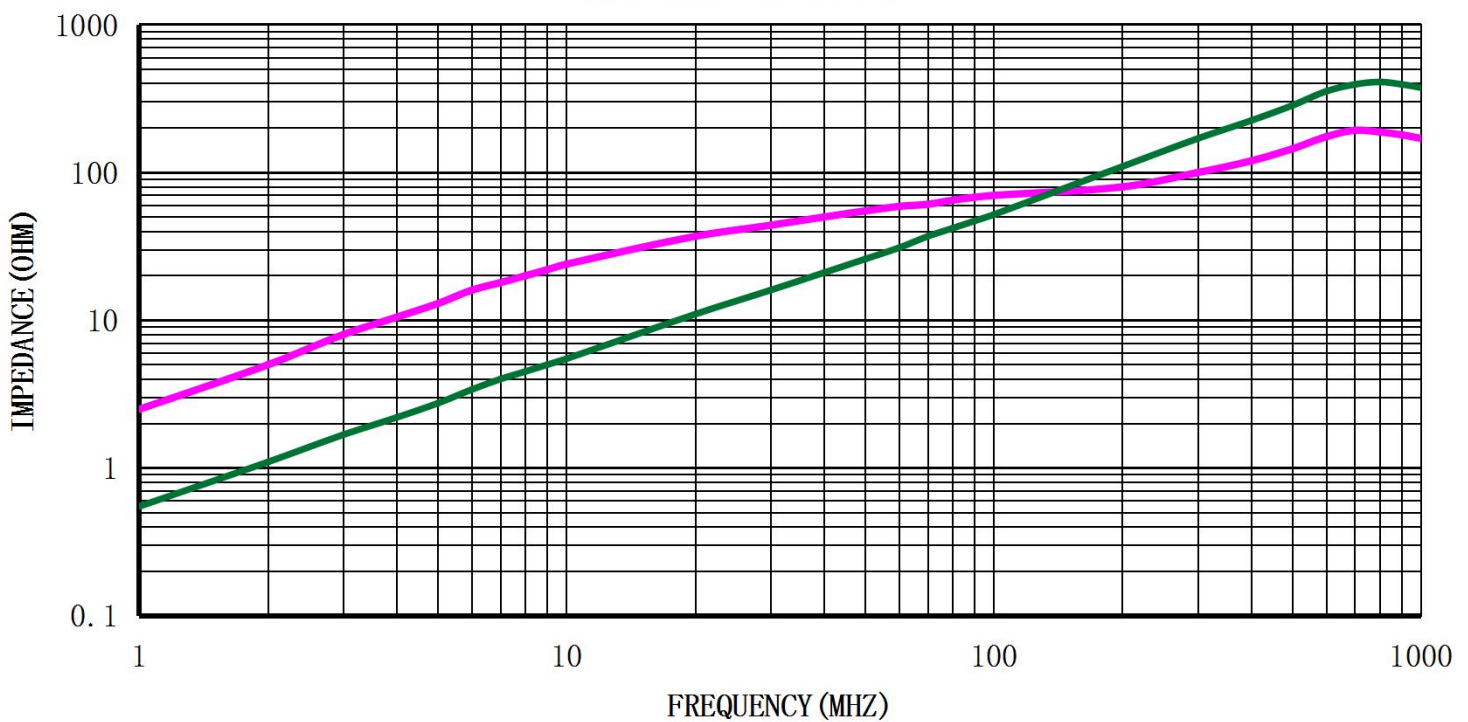
# Common Mode Filters

◎ The Test Curve 樣品測試曲線:

## BOK6E-04A15T



## BOK6E-1A90T

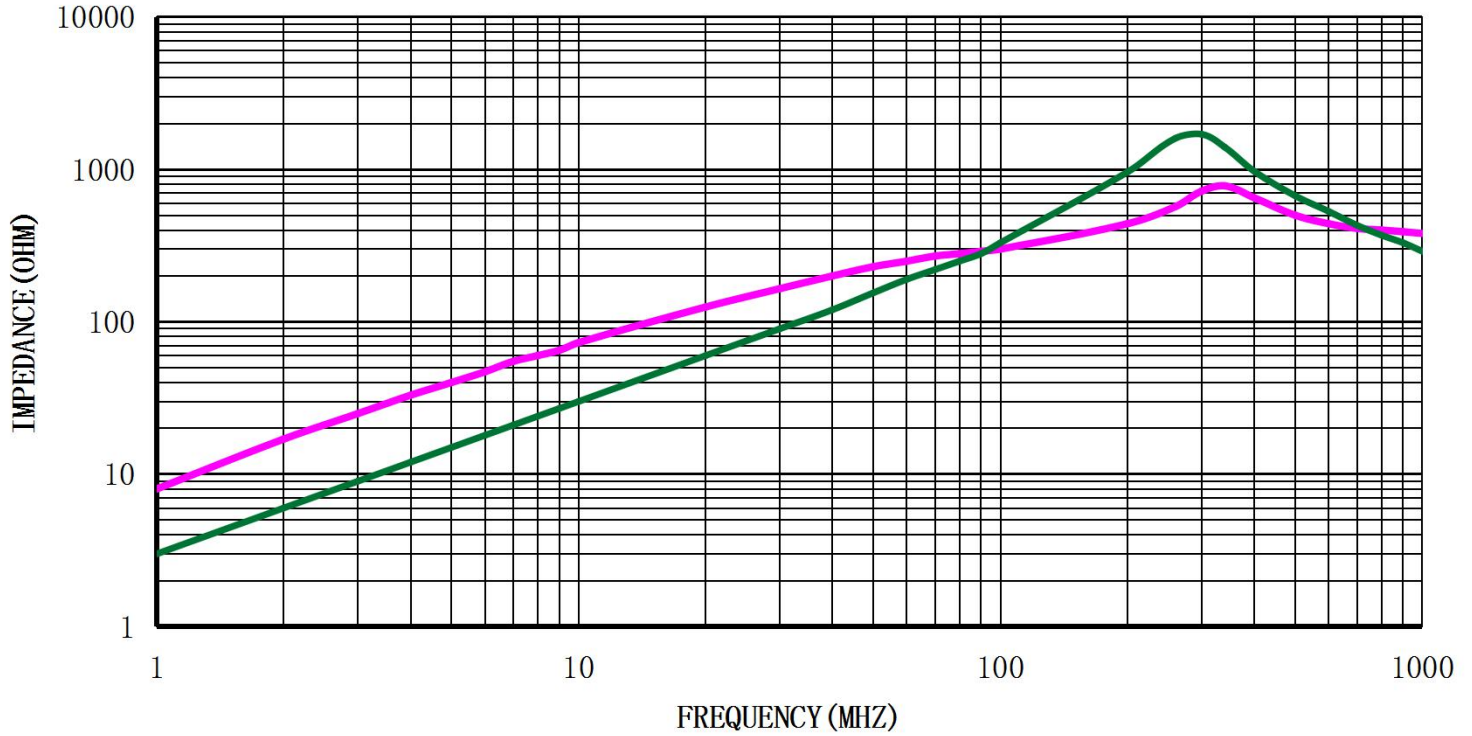


— COMMON MODE — DIFFERENTIAL MODE

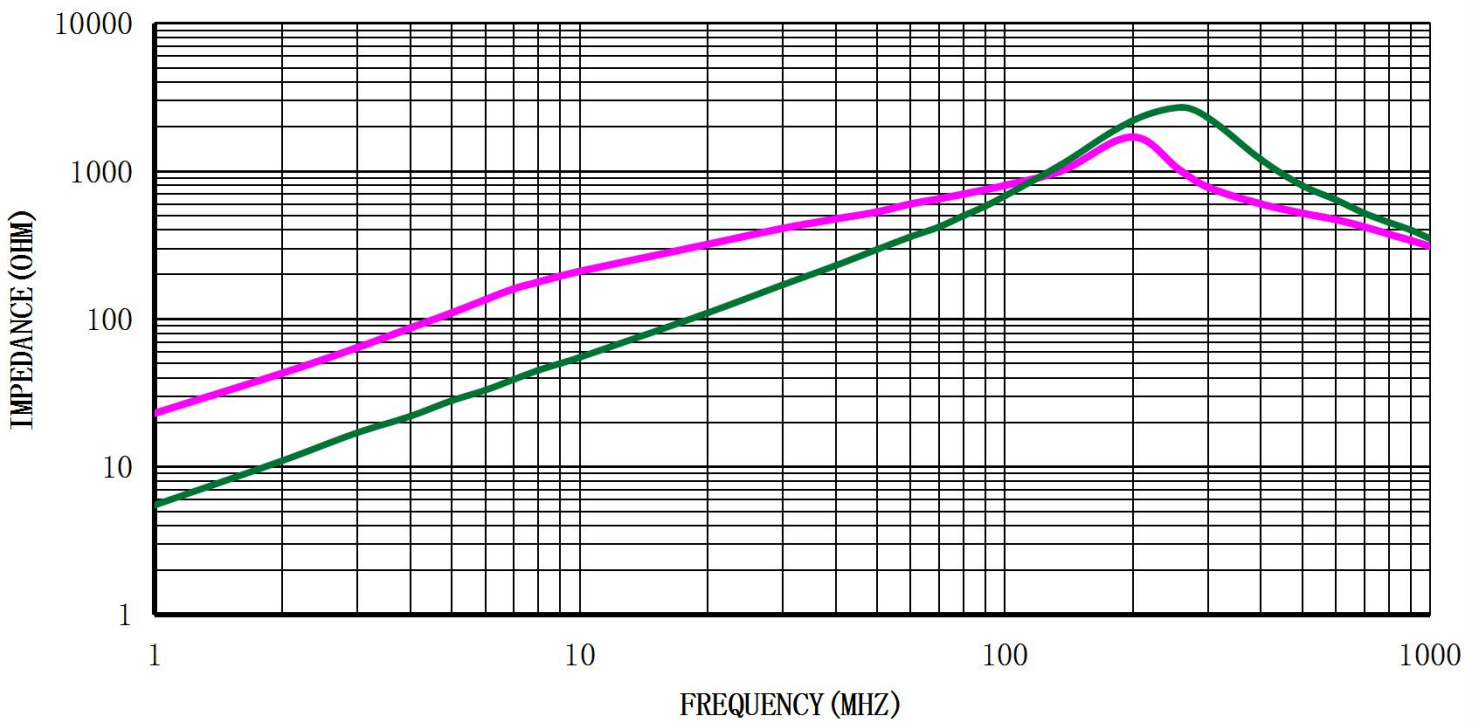
# Common Mode Filters

◎ The Test Curve 樣品測試曲線:

## BOK6E-3A50T



## BOK6E-7A40T



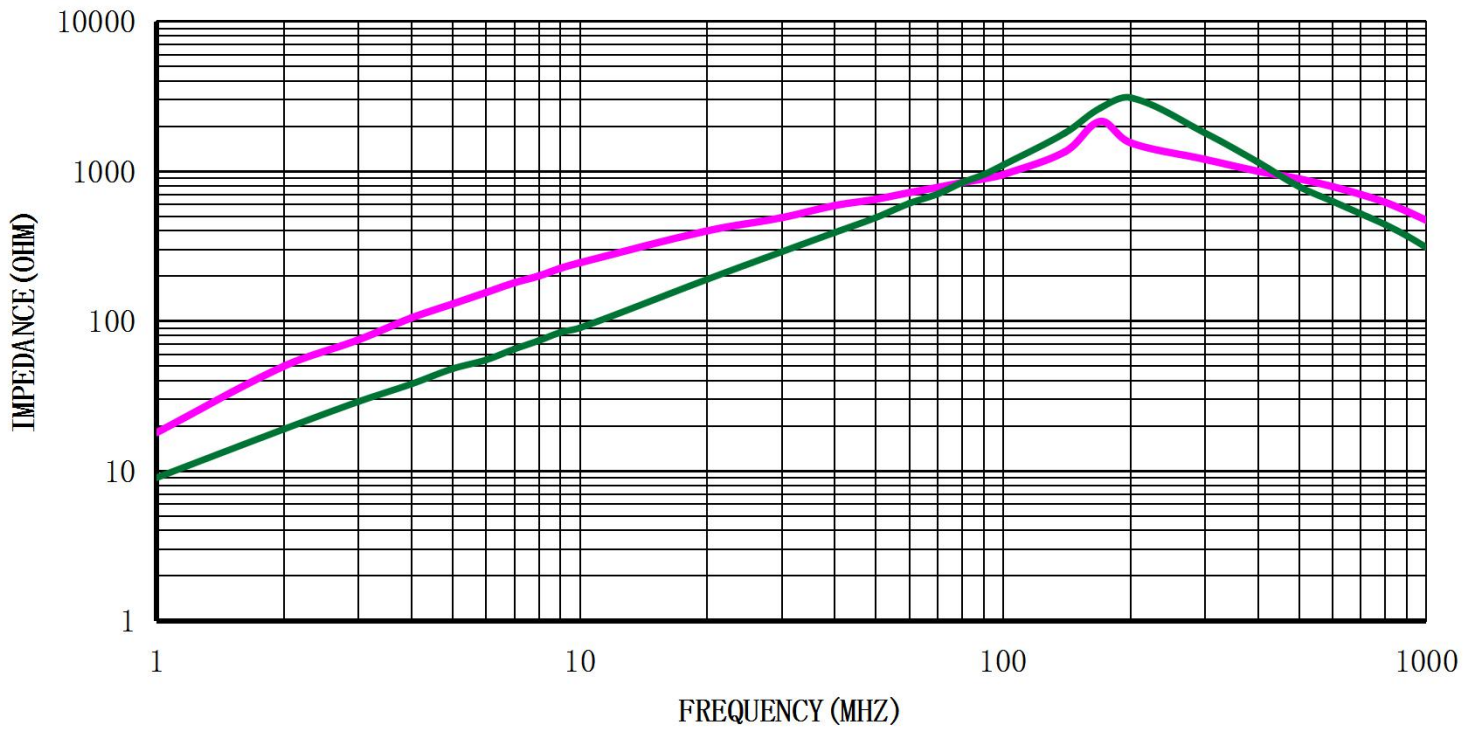
COMMON MODE

DIFFERENTIAL MODE

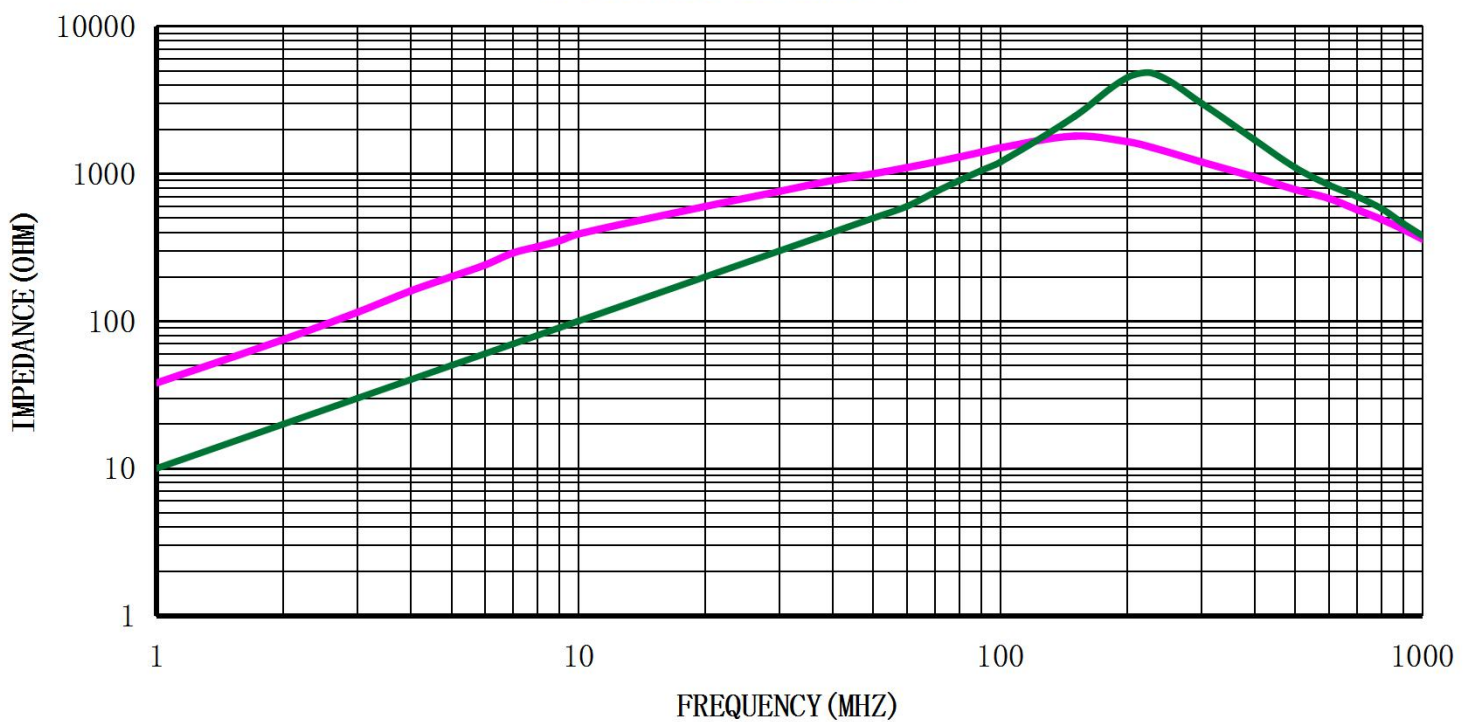
# Common Mode Filters

◎ The Test Curve 樣品測試曲線：

## BOK6E-10A30T



## BOK6E-13A25T



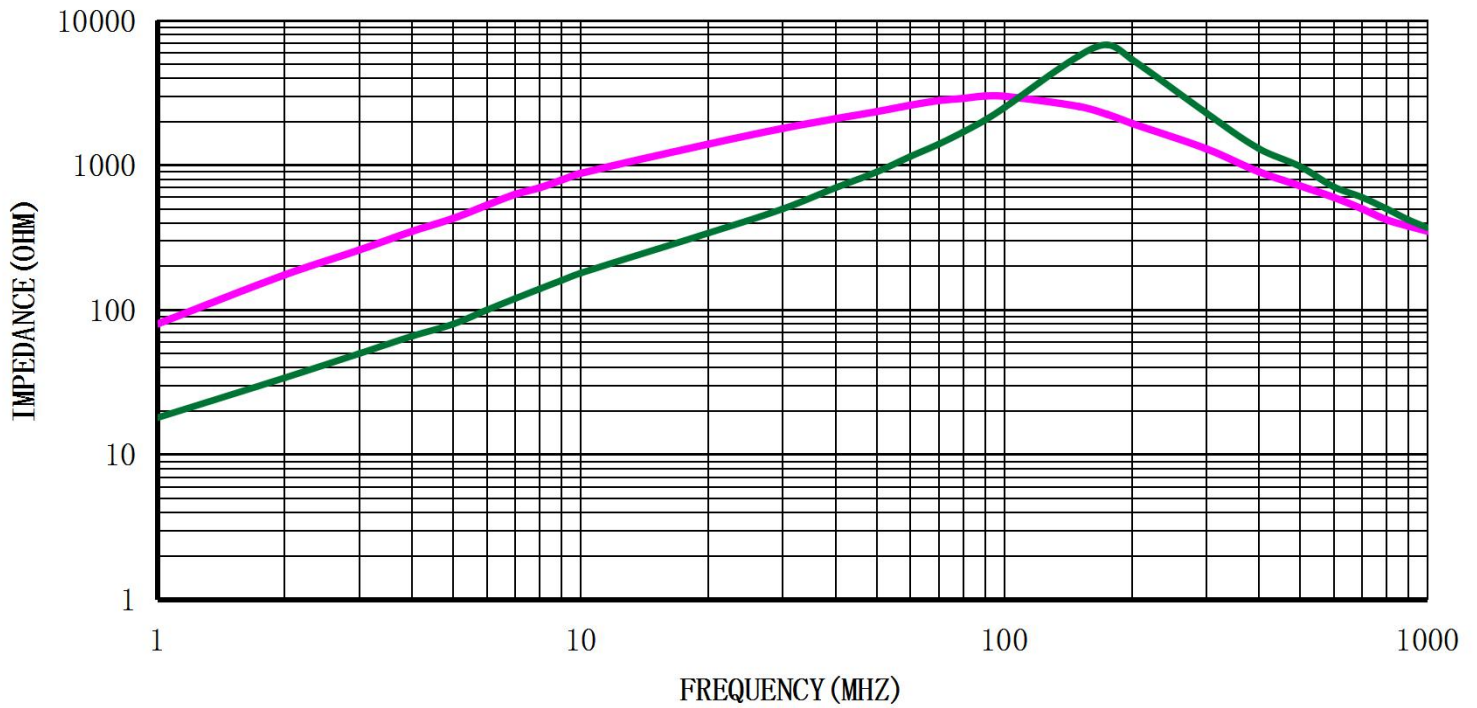
— COMMON MODE — DIFFERENTIAL MODE



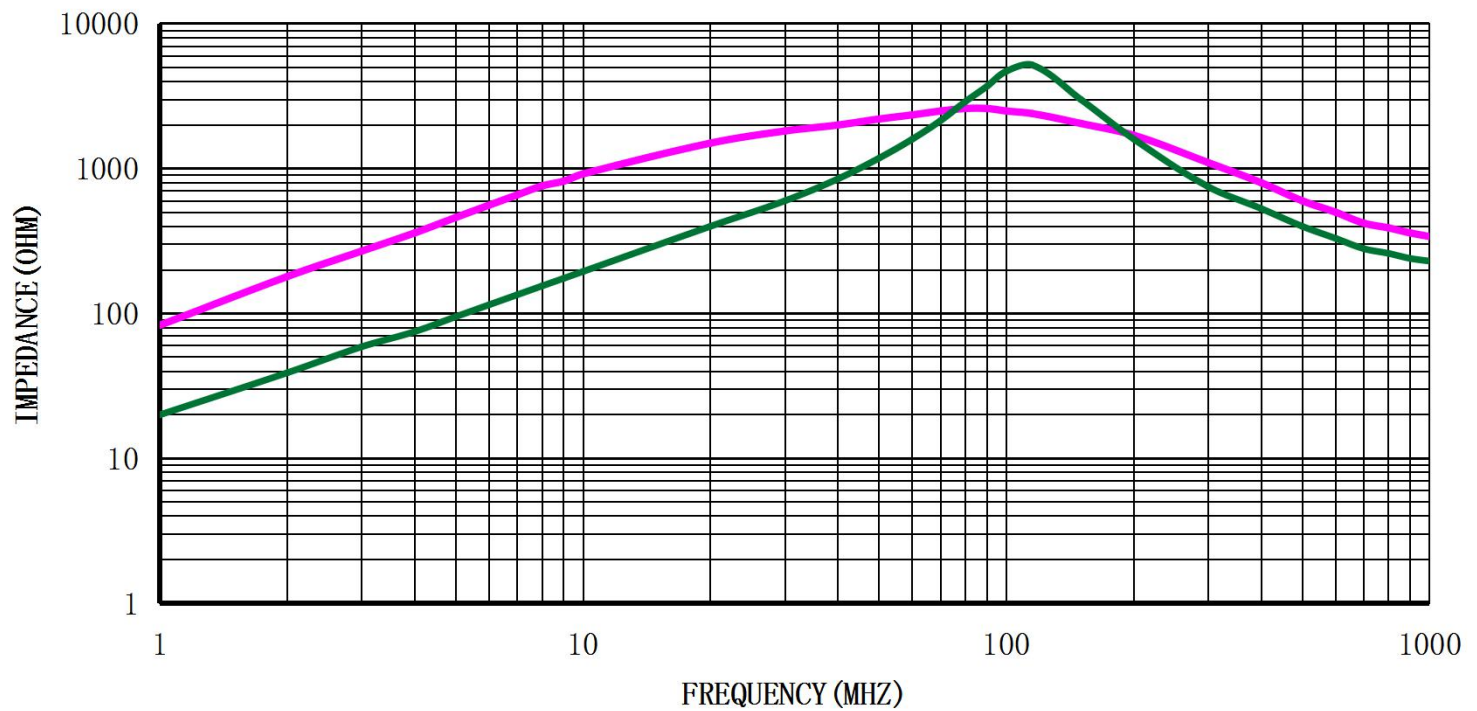
# Common Mode Filters

◎ The Test Curve 樣品測試曲線：

## BOK6E-27A10T



## BOK6E-30A09T

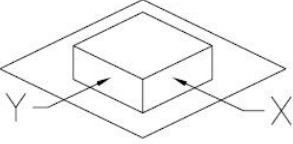


— COMMON MODE      — DIFFERENTIAL MODE



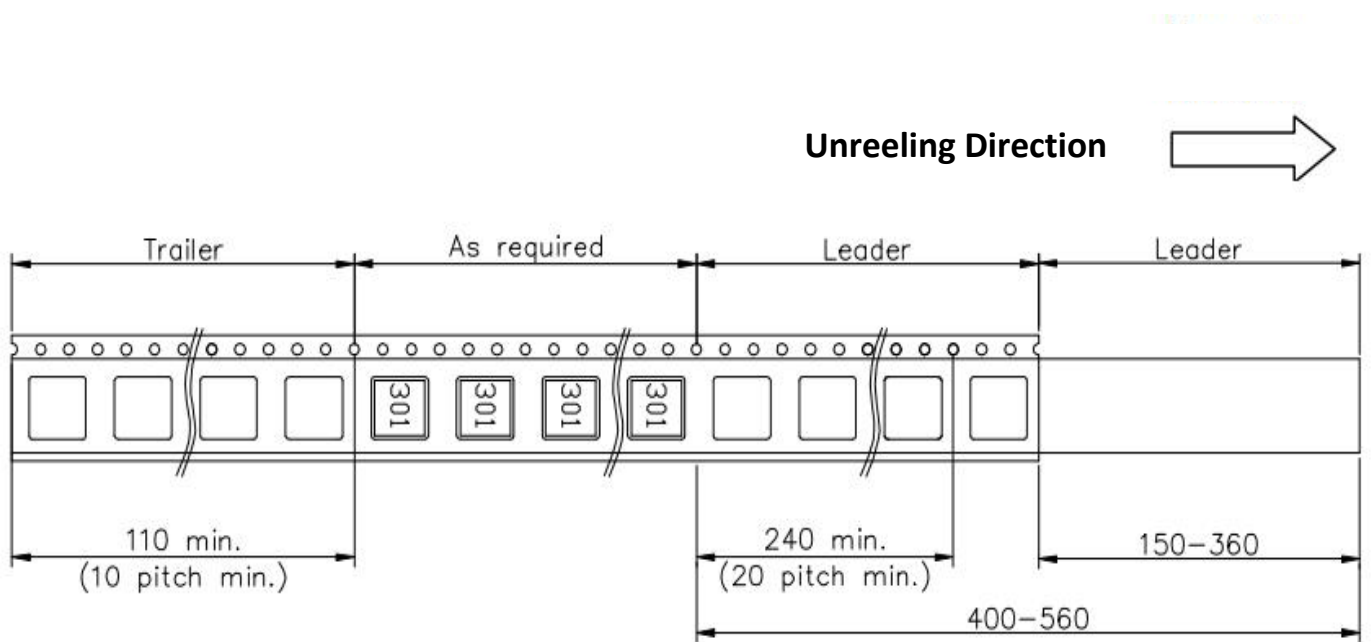
# Common Mode Filters

## ◎ Reliability Testing 可靠性測試:

Operating Temperature	- 40 to +125 °C ( Contain Heating coil )
Appearance Inspection	No external defects by visual inspection
Terminal Strength 	After soldering , between copper plaet and terminals of coils , push in two directions of X , Y with standing 10N(1.02kg) for10+/-2 sec. Terminal should not peel off. ( Refer to figure at right )
Heat endurance of reflow soldering	Refer to figure
Insulating resistance	Over 100 MΩ at 100V D.C . between wire and core
Dielectric Strength	Apply at 0.5KV 3mA for 1 minute between wire and core
Temperature characteristics	Inductance coefficient ( 0~2,000 ) × 10 / °C ( - 40~ + 125 °C )
Humidity characteristics	Inductance deviation within ± 10% , after 96 hours in 90~95% relative humidity at 40 ± 2 °C and 1 hours drying under normal condition
A test is made under the above mentioned condition , and it is kept for 2 hours in the normal	

# Common Mode Filters

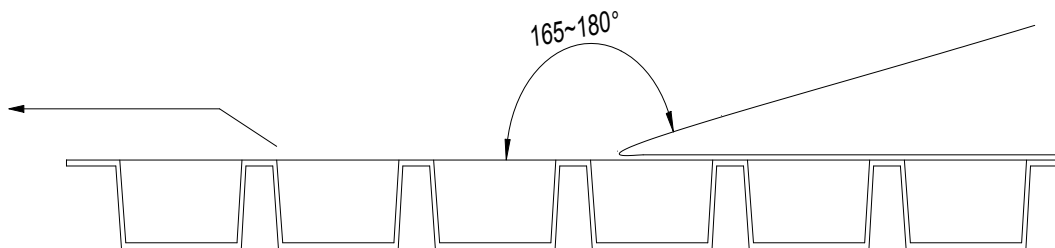
## ◎ Taping Specification 產品編帶



## ◎ Transparent carrier and cover tape 載帶及蓋帶

Adhesive strength of cover tape is 20 to 120 gf

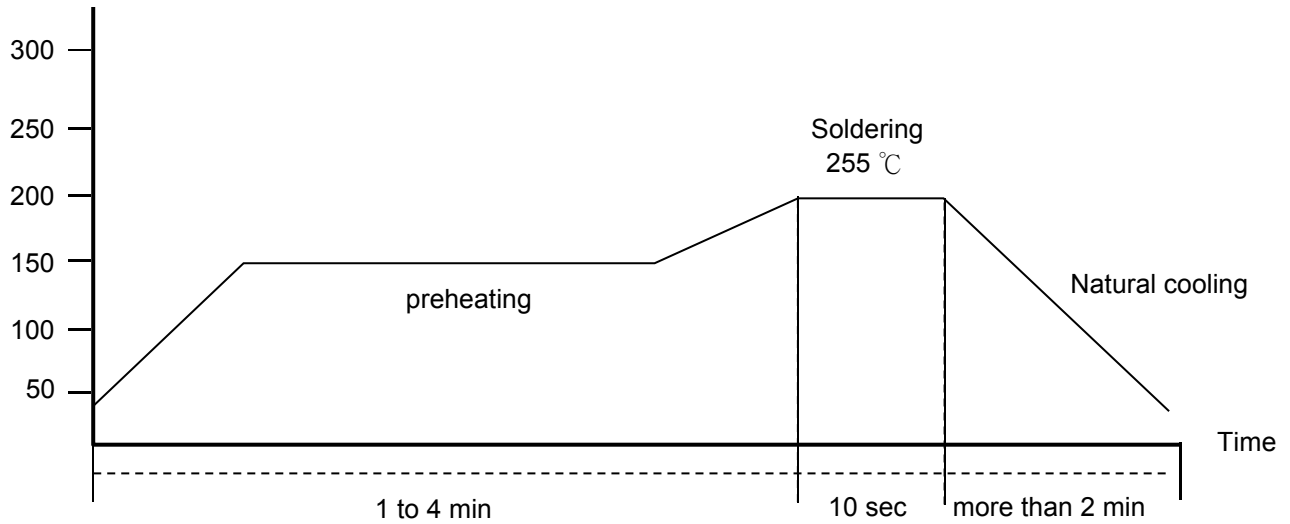
The conduction band direction



# Common Mode Filters

## © IR Reflow profile 回流焊:

Temperature °C



Temperature and humidity . After that , no mechanical and electrical defect should be found .