增 益 实 业

零 件 承 认 书

SPECIFICATION FOR APPROVAL

客户名称: 0110

增益型号：

规格描述： ZEACM9070F贴片共模滤波器规格书

日　　期: 2023/5/01

版　　本: A

增益签核:

制订	审核	核准
张翔	刘业明	柯文学

客户签核:

工程	审核	核准

东莞市增益实业有限公司
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电话：0769-87321000
传真：0769-87891229

物料类型：	共模电感
日　　期:	2023/5/01
版　　本:	A

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SMD Common Mode Inductor



产品特征：

●适用大电流的片式共模滤波器
●所有系列产品的形状均控制在最小限度
同时共模阻抗超过了300~1000(10MHz时)可大幅抑制共模噪音
●产品的高度尺寸也被控制在较低水平
能够适应不断小型轻量化的便携式设备的高密度化趋势
●符合RoHS,无卤和REACH
●采用紧凑的SMD封装工艺，节省PCB空间
●工作温度范围： -55℃~+125℃

产品应用：

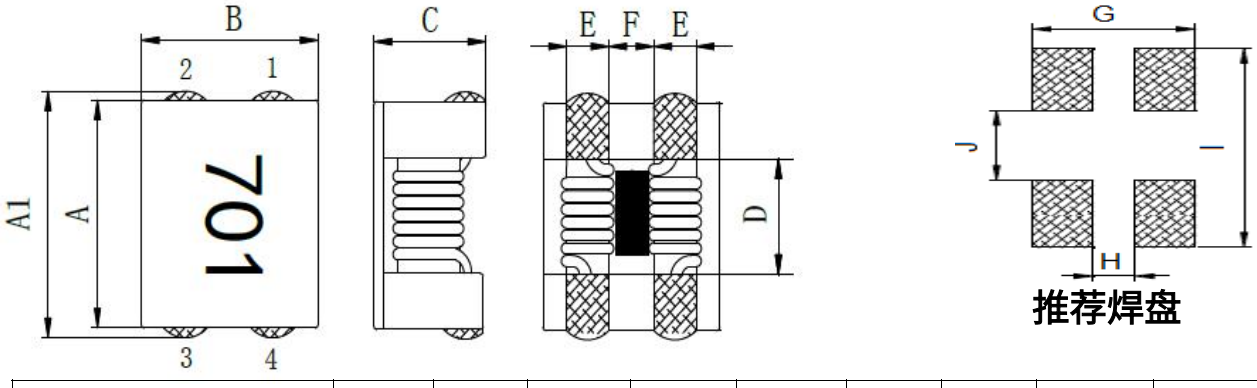
●数据线、信号线的共模噪声抑制
●电源线的共模噪声抑制80VDC(42VAC)
●EMI对策用
●特别适用于USB、CAN、IEEE194(FireWire)、HDMI、LVDS、 LAN等线路的电磁干扰抑制

产品型号识别：

ZEACM	9070F	- 301	T6A00
1	2	3	4

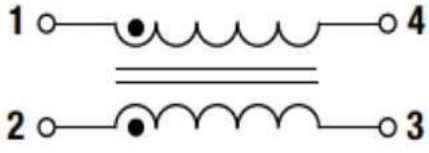
1.类型：贴片共模滤波器
2.规格外形尺寸
3.阻抗：301=300Ω
4.T: 编带包装 6A00：额定电流，6A

产品外形尺寸（单位：mm）：



P/N	A	A1	B	C	D	E	F	G	H	I	J
	±0.5	±0.5	±0.5	Max	Typ	Typ	Typ	Typ	Typ	Typ	Typ
ZEACM9070F	9.00	9.50	7.00	4.80	5.60	1.50	1.70	5.50	1.50	10.50	5.00

产品电路图：



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产品电气特性(25℃下的电气规格)：

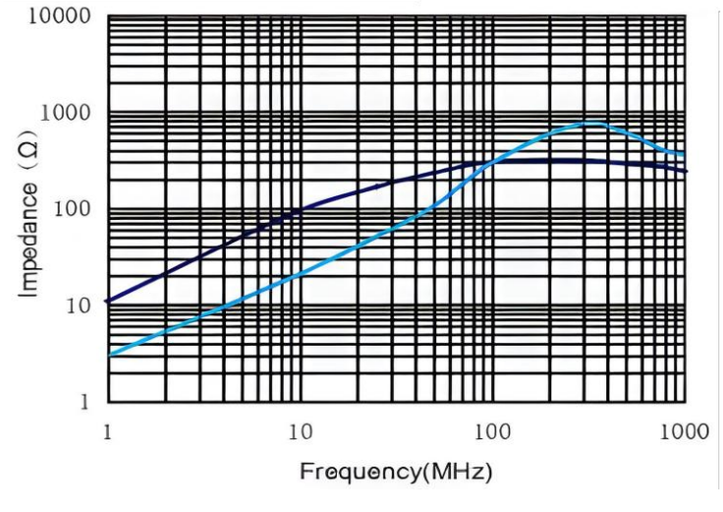
规格型号	阻抗		额定电流	直流电阻	绝缘电阻	额定电压	测试频率	印字
Part No.	Z Min(Ω)	Z Typ(Ω)	Max.Ir(A)	Max. (mΩ)	Min(MΩ)	Max(V)	Test Freq.	
ZEACM9070F -301T6A60	225	300	6.6	5.5	10M	80	100MHz	301
ZEACM9070F -501T6A00	450	600	6.0	7.3	10M	80	100MHz	501
ZEACM9070F -601T5A50	500	700	5.5	9.0	10M	80	100MHz	601
ZEACM9070F -701T5A50	500	700	5.5	9.0	10M	80	100MHz	701
ZEACM9070F -102T4A40	750	1000	4.4	11.8	10M	80	100MHz	102
ZEACM9070F -202T3A30	1500	2200	3.3	45.5	10M	80	100MHz	202
ZEACM9070F -222T3A30	1700	2200	3.3	45.5	10M	80	100MHz	222
ZEACM9070F -272T2A20	2000	2700	2.2	72.8	10M	80	100MHz	272
ZEACM9070F -302T2A20	2500	3000	2.2	72.8	10M	80	100MHz	302

● Rated Current: the actual value of DC current when the temperature rise isΔT 40℃ (Ta =25℃).

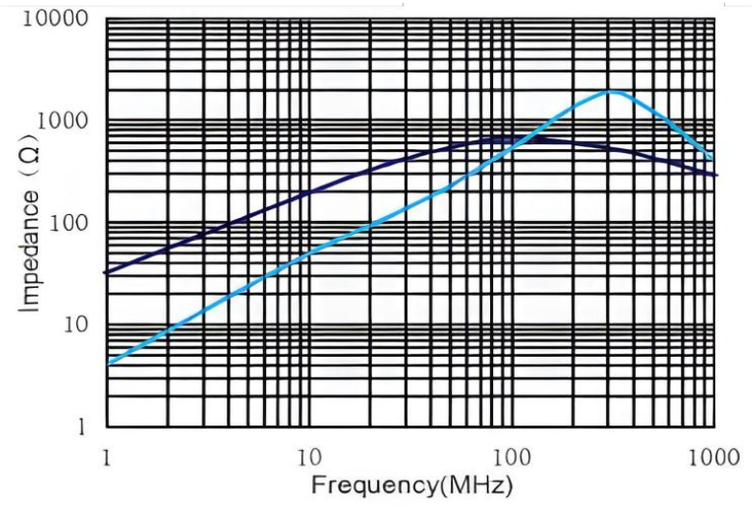
产品特性曲线图：

Common Mode
Differential Mode

ZEACM9070F -301T6A00



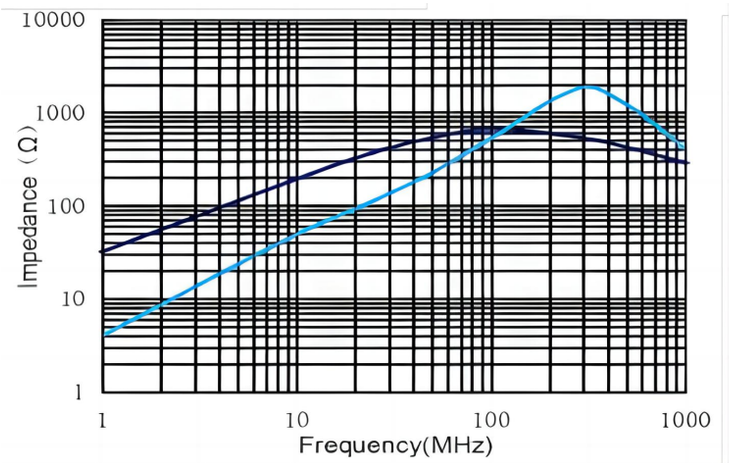
ZEACM9070F -501T5A50



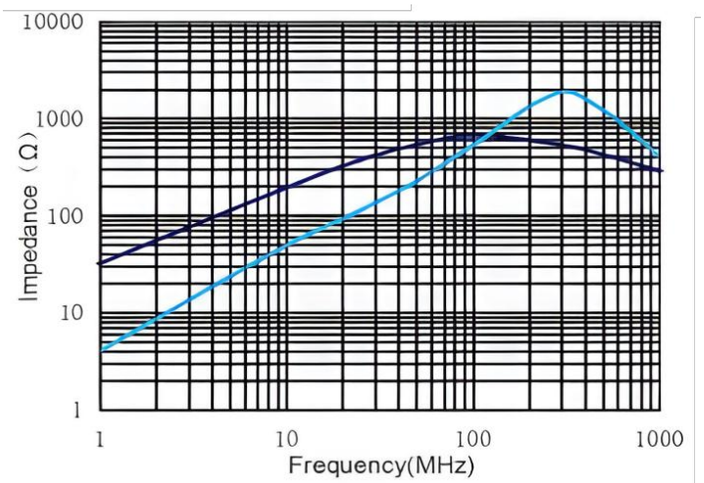
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产品特性曲线图：

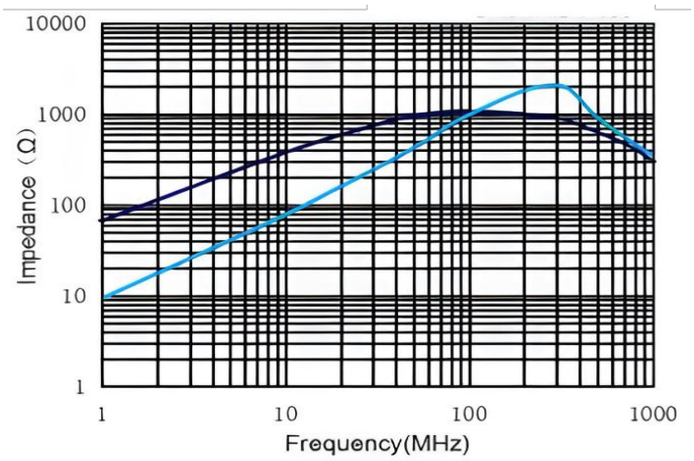
ZEACM9070F -601T5A00



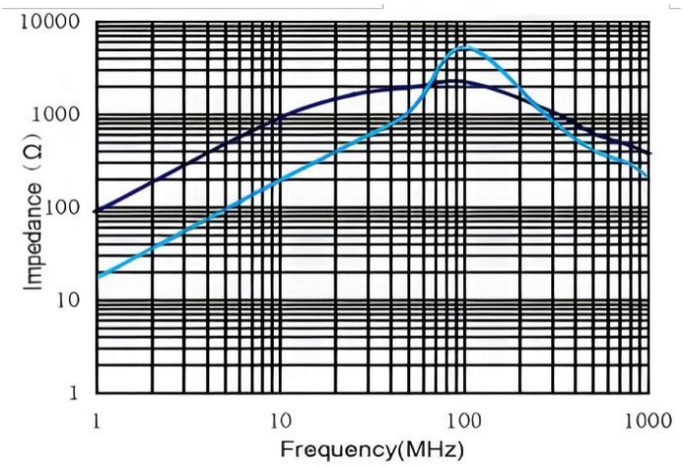
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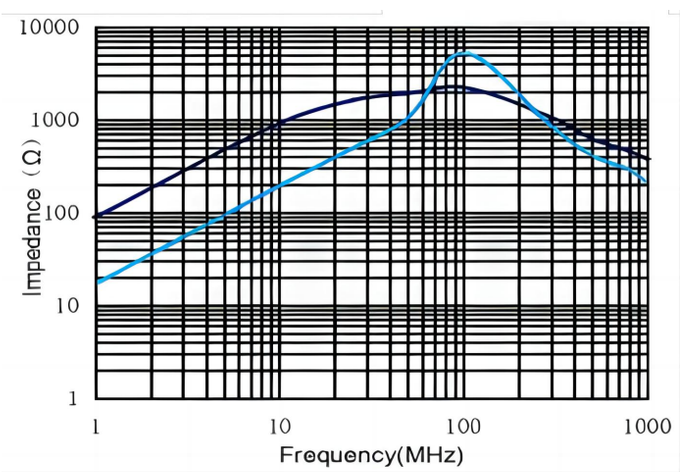
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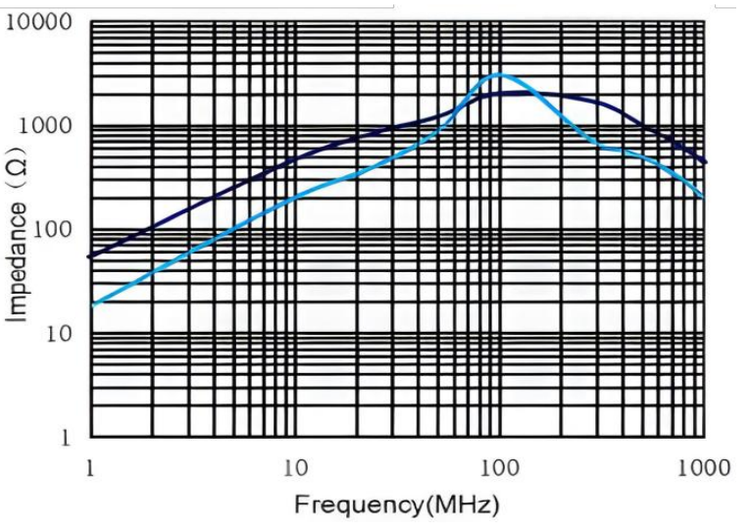
ZEACM9070F -202T3A00



ZEACM9070F -222T3A00



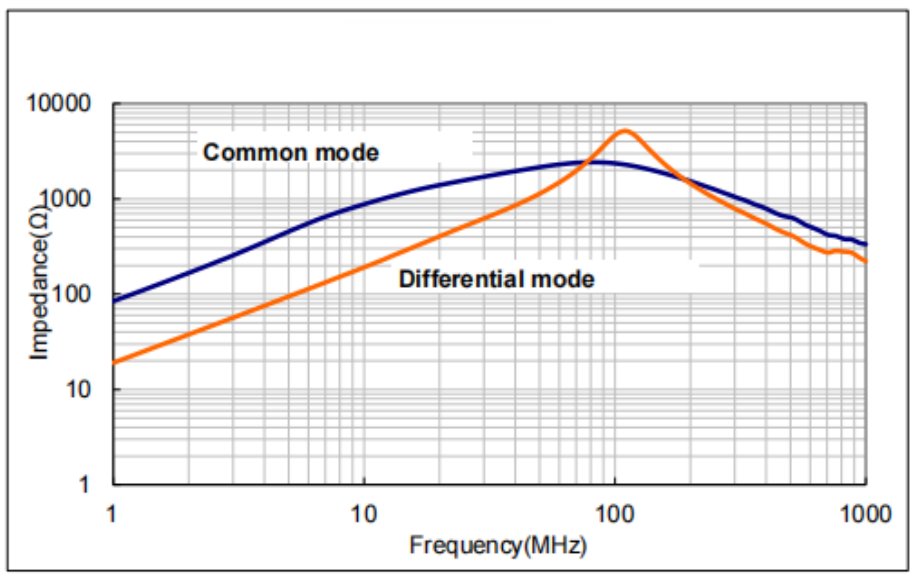
ZEACM9070F -272T2A00



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产品特性曲线图：

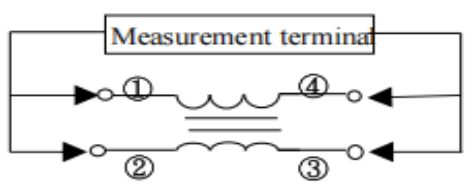
ZEACM9070F-302T2A00



产品电气特性测试设备：

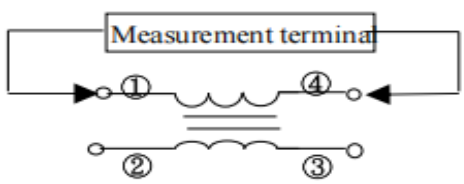
Impedance

Measured by using HP4291B RF Impedance Analyzer.



DC Resistance

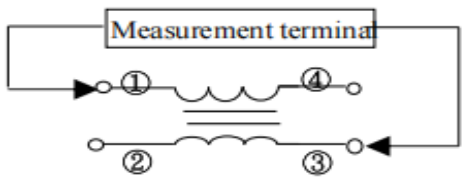
Measured by using Chroma 16502 milliohm meter.



Insulation Resistance

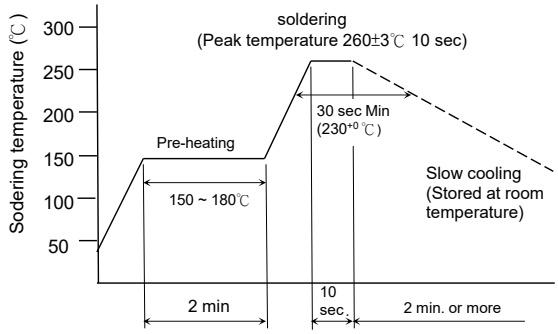
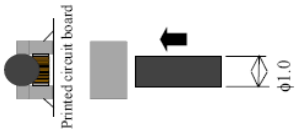
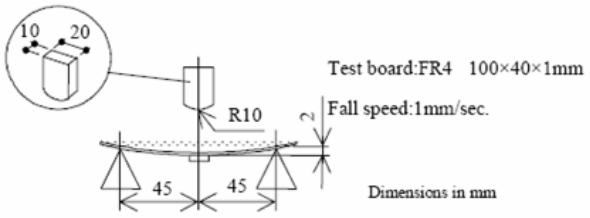
Measured by using Chroma 19073

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



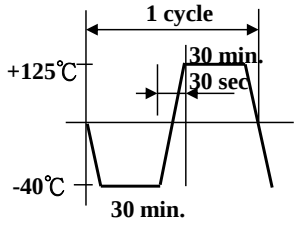
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可靠性测试：

TEST ITEM	SPECIFICATION	TEST DETAILS
Solder ability	The product shall be connected to the test circuit board by the fillet (the height is 0.2mm).	Apply cream solder to the printed circuit board . Refer to clause 8 for Reflow profile.
Resistance to Soldering heat (reflow soldering)	There shall be no damage or problems.	Temperature profile of reflow soldering  The specimen shall be passed through the reflow oven with the condition shown in the above profile for 1 time. The specimen shall be stored at standard atmospheric eric conditions for 1 hour, after which the measurement shall be made.
Terminal strength	The terminal electrode and the ferrite must not damaged.	Solder a chip to test substrate , and then laterally apply a load 9.8N in the arrow direction. 
Strength on PC board bending	The terminal electrode and the ferrite must not damaged.	Solder a chip to test substrate and then apply a load. 
High temperature resistance	Impedance:Within±20% of the initial value. Insulation resistance and DC resistance on the specification(refer to clause 2-1) shall be met. The terminal electrode and the ferrite must not damaged.	After the samples shall be soldered onto the test circuit board,the test shall be done. Measurement : After placing for 24 hours min. Temperature : +125±2℃ Applied voltage : Rated voltage Applied current : Rated current Testing time : 500±12 hours

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可靠性测试：

TEST ITEM	SPECIFICATION	TEST DETAILS
Humidity resistance	Impedance:Within±20% of the initial value. Insulation resistance and DC resistance on the specification(refer to clause 2-1) shall be met. The terminal electrode and the ferrite must not damaged.	After the samples shall be soldered onto the test circuit board,the test shall be done. Measurement : After placing for 24 hours min. Temperature : +60±2℃ , Humidity : 90 to 95 %RH Applied voltage : Rated voltage Applied current : Rated current Testing time : 500±12 hours
Thermal shock	Impedance:Within±20% of the initial value. Insulation resistance and DC resistance on the specification(refer to clause 2-1) shall be met. The terminal electrode and the ferrite must not damaged.	
Low temperature storage	Impedance:Within±20% of the initial value. Insulation resistance and DC resistance on the specification(refer to clause 2-1) shall be met. The terminal electrode and the ferrite must not damaged.	After the samples shall be soldered onto the test circuit board,the test shall be done. Measurement : After placing for 24 hours min. Temperature : -40±2℃ Testing time : 500±12 hours
Vibration	Impedance:Within±20% of the initial value. Insulation resistance and DC resistance on the specification(refer to clause 2-1) shall be met. The terminal electrode and the ferrite must not damaged.	After the samples shall be soldered onto the test circuit board,the test shall be done. Frequency : 10 to 55 Hz Amplitude : 1.52 mm Dimension and times : X ,Y and Z directions for 2 hours each.
Solderability	New solder More than 75%	Flux (rosin, isopropyl alcohol{JIS-K-1522}) shall be coated over the whole of the sample before hard, the sample shall then be preheated for about 2 minutes in a temperature of 130～150℃ and after it has been immersed to a depth 0.5mm below for 3±0.2 seconds fully in molten solder M705 with a temperature of 245±2℃. More than 75% of the electrode sections shall be couered with new solder smoothly when the sample is taken out of the solder bath.