

SPECIFICATION FOR APPROVAL

Customer: _____

Part NO.: _____

Part No.

A514F1D103MB F=10.0mm

Specs Of JNC:

5KV-Y5V-103M Long straight lead

★ Environmental requirements: RoHS Corresponds ☒REACH Corresponds ☐Halogen Corresponds ☐

Written	For Customer Approval
Huifang Luo	
Checked	
Lianfei Chen	
Approval	
Xiangang Fan	(For approval, Please also an)

	Ceramic Capacitor Specification Approval Certificate			
	NO.	WI-002B-001	Date	2025 年 12 月 03 日
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一、Purpose:

The creation of an acknowledgement letter is intended to reach an agreement with the customer regarding product quality, and it can also serve as a standard in case of disputes over quality issues.

二、Scope of Application

This acknowledgment applies to the disc ceramic capacitors produced and sold by our company with a rated voltage not exceeding 6300VDC. It can also serve as the technical quality specification for such products of our company, and be used in ordering, incoming inspection, production, testing, sales, and other related processes.

三、Citation Standard

This specification is formulated in accordance with the GB/T2693-200 standard.

四、Part NO. Explain

4. 1. Part number system:

A5 14 F 1 D 103 M B
 <1> <2> <3> <4> <5> <6> <7> <8>

<1>. Coded representation meaning

code	50	A1	A2	A4	A6
Rated voltage	500VDC	1000VDC	2000VDC	4000VDC	6000VDC

<2>. express the finished diameter code

code	06	07	08	09	10	11	***
The finished diameter	6.00mm	7.00mm	8.00mm	9.00mm	10.00mm	11.00mm	***

<3>. code to indicate the temperature coefficient and temperature characteristics

Temperature coefficient	Minimum operating temperature	Maximum operating temperature	Reference Temperature	Maximum Capacity Relative Rate of Change
Y5P (B)	-30℃	+85℃	+25℃	±10%
Y5U (E)	-30℃	+85℃	+25℃	+22%, -56%
Y5V (F)	-30℃	+85℃	+25℃	+30, -82%

<4>. Lead foot molding

Code	1	2	3	4
Foot shape	Long straight lead	Outside kink lead	Short straight lead	Kink lead

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Code	A	B	E	D	F
Pin spacing (mm)	4.0	5.0	7.5	10.0	12.5

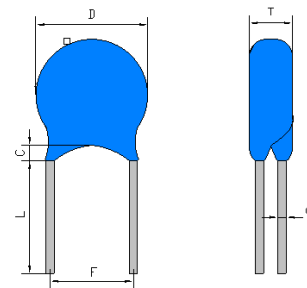
Code	4R7	1R0	101	471	222	472	103
Nominal capacity	4.7PF	1PF	100PF	470PF	2200PF	4700PF	10000PF

Code	J	K	M	Z
Tolerance	±5%	±10%	±20%	-20%, +80%

Code	Meaning
B	bulk
T	tape

NO.	Part No.	JNC Code	Demension (mm)						
			D Min	T Max	Lmin	F±0.5	φ ±0.05	c Max	material
01		A514F1D103MB	14.5	4.5	20.0	10.0	0.55	3.0	Y5V
		NA							

引线样式—长直引线型

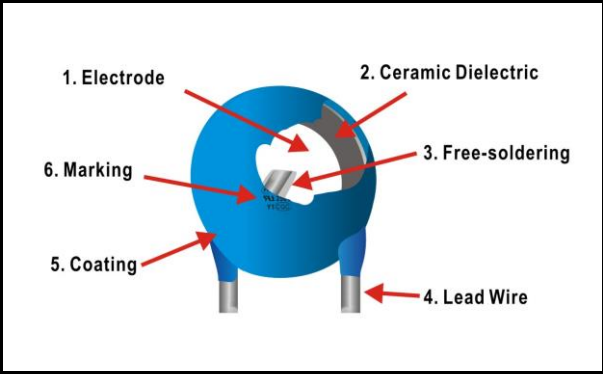


If the specifications your company orders are not included in this unit or differ from this acknowledgment letter, please contact our Sales or Technical Department!

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六、Exterior structure



Note: The encapsulation layer is made of epoxy resin and is blue in color.

七、Marking:

Project			
			Marking
①	Marking	1. The first line '103' indicates the nominal capacity. 2. The second line '5KV': indicates the rated voltage	A circular marking diagram. Inside the circle, the text '103' is on the top line and '5KV' is on the bottom line.

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八、Specifications and Test Methods

Test condition:

Experiments and tests must be conducted under standard conditions (temperature 15 - 30° C, relative humidity 45 - 75%, air pressure 86 - 106 kPa). Unless otherwise specified, if there are doubts about the measurement results or it is specifically requested, the capacitance must be tested under reference conditions (temperature 25±2° C, relative humidity 60 - 70%, air pressure 86 - 106 kPa).

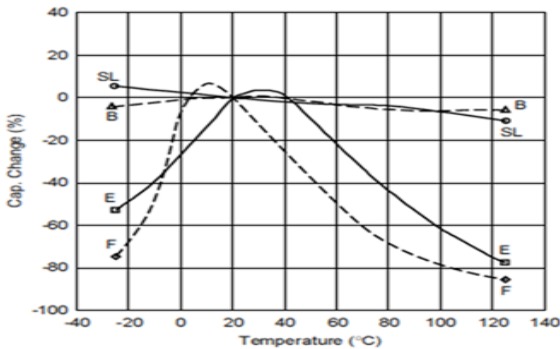
Routine test items.

Project		Test conditions	Inspection Standards
Temperature range		-40℃~125℃	
Class II ceramic capacitor	Capacitance	Temperature: 25℃±2℃ Humidity: 50~60%	Within the allowed tolerance range: C: ±0.25PF, D: ±0.5PF, J: ±5% K: ±10%, M: ±20%
	DF (%)	Voltage: 1.0V±0.2Vrms Frequency: 1±0.2KHZ	DF≤2.5%
	Voltage	Charging current ≤ 0.05A Applied voltage duration: 1 min	Test voltage U = 1.5 kVDC. During the test, the capacitor should not experience breakdown or arcing.
	Insulation Resistance (I. R.)	Measuring voltage: UR < 500V, arbitration voltage UR UR ≥ 500V, arbitration voltage 500V Charging current ≤ 0.05A Measurement time: 1 min	R≥4000MΩ

Room temperature refers to conditions where the temperature is 15-30° C, relative humidity is 45-75%, and air pressure is 86-106 kPa.

九、Temperature Characteristic Curves

B: Y5P E: Y5U F: Y5V S:SL



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十. Storage Environment Requirements

- 1. Due to the presence of hydrogen chloride, hydrogen sulfide, sulfur compounds, and othersubstances in the atmosphere, when the product is stored in the air, attention must be paid to the potential deterioration of the solderability of the leads.
- 2. The product should not be exposed to high temperatures or high humidity and must be stored under the following conditions (without opening the original packaging):
 - A. Temperature: $\leq 35^{\circ}\text{C}$
 - B. Humidity: $\leq 70\% \text{ RH}$
 - C. Storage Period (calculated from the date on the product packaging or the product itself):
 - Bulk products: no more than 24 months
 - Taped products: no more than 12 months.

十一. Environmental management control material

NO.	Types of hazardous substances	The name of the hazardous substances	Limited level
1	Heavy metals	Cadmium (Cd)/Cadmium Compounds	<100ppm
		Lead (Pb)/Lead Compounds	<1000ppm
		Mercury (Hg)/Mercury Compounds	<1000ppm
		Hexavalent-Chromium (Cr6+) Compounds	<1000ppm
2	Organic bromide	PBB	<1000ppm
		PBDE	<1000ppm

Note: In case of discrepancies between standards, the latest product standard shall prevail.