



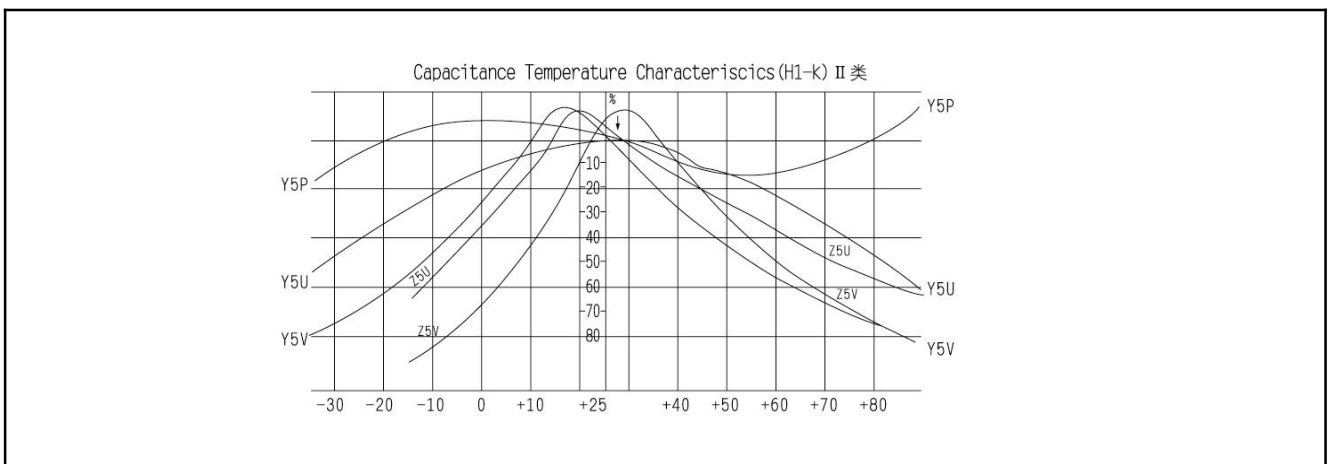
Appearance Size and Structure

Part No	Model	L Min (mm)	D Max (mm)	T Max (mm)	F (mm)	d (mm)	Appearance Size
1	Y2-Y5V-471M	25	8.0	4.0	7.5±0.5	0.6±0.05	
2	Y2-Y5V-152M	25	8.0	4.5	7.5±0.5	0.6±0.05	
3	Y2-Y5V-472M	25	10	4.5	7.5±0.5	0.6±0.05	
4	Y2-Y5V-222M	25	8.0	4.0	7.5±0.5	0.6±0.05	
5	Y2-Y5V-332M	25	9.0	4.5	7.5±0.5	0.6±0.05	

Temperature Coefficient

Code	T. R.	Cap change
Y5V	-25°C ~ +85°C	+22% ~ -82%

Capacitance and Temperature Curve





According to: Specification

- GB/T 2693 《Fixed capacitors for use in electronic equipment
Part1: Generic specification》
- GB/T 5966 《Fixed capacitors for use in electronic equipment
Part8: Sectional specification
Fixed capacitors of ceramic dielectric, Class I 》
- GB/T 5968 《Fixed capacitors for use in electronic equipment
Part8: Sectional specification
Fixed capacitors of ceramic dielectric, Class II 》
- GB 11305 《Fixed capacitors for use in electronic equipment
Sectional specification
Fixed capacitors of ceramic dielectric, Class III》
- GB/T 14472 《Fixed capacitors for use in electronic equipment
Part14: Sectional specification
Fixed capacitors for electromagnetic interference suppression and
connection to the supply mains》
- GB2828 《Sampling procedures and tables for lot-by-lot inspection by attributes》
- GB2829 《Sampling procedures and tables for periodic inspection by attributes》

Quality Assurance (OQC) and Test

Check item (lot)	Check level	
	IL	AQL
1. Appearance 2. Size	S--4	2.5
1. Capacitance 2. DF 3. Voltage proof 4. Insulation resistance	II	0.25
1. Solder ability of leads	S--3	2.5



□ Specification and Testing Method

Item	Specification	Testing Method												
1. Operating Temperature Range	-25~+85℃													
2. Capacitance	M: +20%-20%	Temperature: 25±2℃ Voltage: 1.0±0.2Vrms Frequency: 1.0±0.2KHz												
3. DF	5.0%max	Temperature: 25±2℃ Voltage: 1.0±0.2Vrms Frequency: 1.0±0.2KHz												
4. Insulation Resistance (IR)	5000MΩmin	Apply voltage: 500VDC Apply current: $I \leq 0.05A$ Test time: 1min												
5. Dielectric Strength	No failure	Rated voltage: Y2: 1500VAC Apply current: $I \leq 2 \pi \times f \times C \times U$ Test time: 1min												
6. Temperature Characteristic	Y5V: +22%~ -82%	The capacitance measurement shall be made at each step: Before Test: Set the capacitor for 1hour at 85 ± 2 °C ,after 24 ± 2 hour at room temperature, then can be measured. <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Step</th> <th>Temperature</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>20±2℃</td> </tr> <tr> <td>2</td> <td>-25±3℃</td> </tr> <tr> <td>3</td> <td>20±2℃</td> </tr> <tr> <td>4</td> <td>85±2℃</td> </tr> <tr> <td>5</td> <td>20±2℃</td> </tr> </tbody> </table>	Step	Temperature	1	20±2℃	2	-25±3℃	3	20±2℃	4	85±2℃	5	20±2℃
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Item		Specification	Testing Method
10. Humidity loading	Appearance	No marked defect	Apply rated voltage for 500 hours at $40\pm 2^{\circ}\text{C}$ in 90 to 95%RH Pre-treatment: capacitor shall be stored 1 hour at $85\pm 2^{\circ}\text{C}$ after at normal temperature for 24 ± 2 hour before initial measurements. Post-treatment: capacitor shall be measured after 24 ± 2 hours at normal temperature.
	Capacitance change	Y5V: $\Delta C/C \leq 30\%$	
	DF	Y5V: 7.5%max	
	Insulation Resistance (IR)	3000M Ω min	
11. Life Test	Appearance	No marked defect	Apply 150% of the rated voltage for 1000 hours at $85\pm 2^{\circ}\text{C}$ Pre-treatment: capacitor shall be stored 1 hour at $85\pm 2^{\circ}\text{C}$ after at normal temperature for 24 ± 2 hour before initial measurements. Post-treatment: capacitor shall be measured after 24 ± 2 hours at normal temperature.
	Capacitance change	Y5V: $\Delta C/C \leq 30\%$	
	DF	Y5V: 7.5%max	
	Insulation Resistance (IR)	3000M Ω min	
12. Strength of lead	Dielectric strength	Lead wire shall not cut off, Capacitor shall not be broken.	As a figure fix the body of capacitor, apply a tensile weight gradually to each lead in the radial direction of capacitor up to 10N and keep it for 10 ± 15 sec.
	Bending		Each lead wire shall be subjected to 5N weight and then $\pm 45^{\circ}$ bend twice.
	Turn back strength		Each lead wire shall be turn back twice at 180° .
13. Solderability of leads	Lead wire shall be soldered with coated over 95% of the circumferential direction.		The lead wire of a capacitor shall be dipped into flux and then into molten solder of $235\pm 5^{\circ}\text{C}$ for 2 ± 0.5 sec.