

**特点**

- 符合 GB/T 5968(IEC 60384-9, IDT)的要求
- 非线性温度特性
- 尺寸小容量大
- 符合 RoHS 2.0 的要求，无卤

**应用**

- 旁路和耦合电路
- 对电容量稳定性和损耗要求不高的电路

**特性****Features**

- Comply with GB/T 5968 (IEC 60384-9) standards
- Nonlinear temperature coefficient of capacitance
- Large capacitance in small sizes
- RoHS 2.0 complied, halogen-free

**Applications**

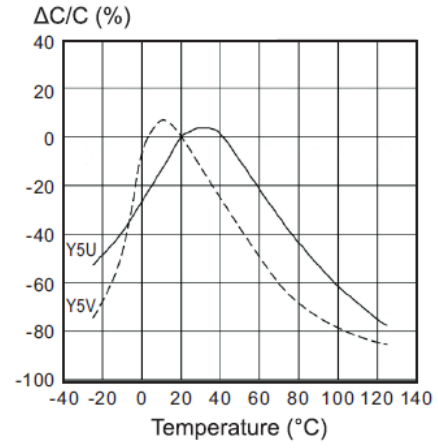
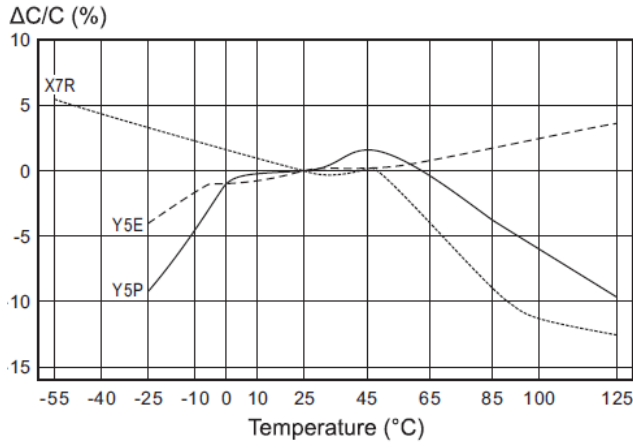
- By-pass and coupling
- Frequency discriminating circuits where Q and stability of capacitance characteristic are not major importance

**Specifications**

操作温度范围 Operating temperature range	-25°C to +85°C (X7R: -55°C to +125°C)
电容量 (C <sub>R</sub> ) Capacitance (C <sub>R</sub> )	Range: 100pF to 0.1uF Tolerance: K(±10%), M(±20%), Z(+80/-20%) 在 25±1°C 下使用 1kHz 1.0Vrms 进行测量，在允许偏差范围内 Measured at 1kHz, 1.0Vrms and 25°C±1°C, within the specified tolerance
损耗角正切(tanδ) Tangent of loss angle (tanδ)	≤0.035 测量条件同“电容量(C <sub>R</sub> )” Measured condition see “Capacitance (C <sub>R</sub> )”
额定电压(U <sub>R</sub> ), DC Rated Voltage (U <sub>R</sub> ), DC	50V to 6300V 在两导线间施加下列电压，时间 1s 到 5s (充/放电电流小于 50mA) The capacitor should not be damaged when the following voltage is applied between the lead wires for 1 to 5 sec (Charge / Discharge current ≤50mA) <630V, 2.5U <sub>R</sub> ≥630V, 1.5U <sub>R</sub> +500V
绝缘电阻 Insulation Resistance	>6 000MΩ 在两导线间施加额定电压(额定电压大于 500V 时，使用 500V)进行测量，时间不超过 1 分钟 (如果绝缘电阻达到要求值时，试验可以在更短的时间内结束) The insulation resistance should be measured with a DC voltage not exceeding the rated voltage (above 500V rated voltage tested by 500V) at normal temperature and humidity and less than 1 min. of charging (The test may be terminated in a shorter time, if the required value of insulation resistance is reached).
温度特性 Temperature characteristic	Y5P, Y5U, Y5V, X7R etc.

- 温度特性曲线

## Temperature characteristic Chart



## 高介电常数型陶瓷电容器



## High dielectric constant type ceramic capacitors

### 电容量与尺寸规格表

### Capacitance and Dimension Chart

额定电压, VDC Rated Voltage, VDC	50 / 100				500				1000				2000 / 3000				4000				6000			
温度特性 T. C.	Y5P	X7R	Y5U	Y5V	Y5P	X7R	Y5U	Y5V	Y5P	X7R	Y5U	Y5V	Y5P	X7R	Y5U	Y5V	Y5P	X7R	Y5U	Y5V	Y5P	X7R	Y5U	Y5V
容量 Cap. (pF)																								
100									C				D	D			D	D			D	D		
120									C				D	D			D	D			D	D		
150					C				C				D	D			D	D			D	D		
180					C				C				D	D			D	D			D	D		
220	B	B			C	C			C				D	D			D	D			D	D		
270	B	B			C	C			C				D	D			D	D			D	D		
330	B	B			C	C			C				D	D			D	D			D	D		
390	B	B			C	C			C				D	D			D	D			F	F		
470	B	B			C	C			C				D	D			E	E			F	F		D
560	B	B			C	C			C	D			F	F			F	F			F	F		D
680	B	B			C	C			C	D			G	F			G	G			G	H		E
820	B	B			C	C			D	D			G	G			H	H			I	I		F
1 000	B	B			C	C	C		D	D	C	C	G	G	D	D	I	I	E	E	K	K	F	D
1 200	B	B			E	D	C		F	F	C	C	I	I	E	D	K	K	F	E	L	L	H	F
1 500	B	B			E	E	C		F	F	D	C	I	I	F	D	L	L	G	E	M	M	H	F
1 800	C	C			G	F	C		I	J	D	C	K	J	H	D	M	M	H	F	N	N	K	G
2 200	C	C	B		G	H	C	C	I	J	D	C	L	K	H	D	N	N	I	G	N	N	L	I
2 700	E	E	B		G	H	E	C	L	K	F	C	N	L	I	F	O	O	K	H	N	N	L	J
3 300	E	E	B		I	K	E	C	L	K	F	D	O	O	J	G	O	O	K	I	O	O	L	K
3 900	F	F	B		I	K	E	E	N	L	G	G	O	O	K	H	O	O	L	J	O	O	O	L
4 700	G	G	B	B	K	K	G	E	N	N	I	G	Q	O	K	J			L	K				O
5 600	H	H	C	B	L	L	H	E	O	O	K	G	S	L	L	K			O	K				N
6 800	J	J	D	B	M	M	H	G	P	O	K	I	S	N	K	K			O	L				O
8 200	L	L	E	C	N	N	K	I	S	S	N	K	S	O	N			P	N				S	
10 000	L	L	E	C	N	N	K	I	S	S	N	L	S	O					Q	O				S
15 000				G			N	N			Q	N								P				
22 000				J			O	O			Q	O												
33 000							R	O			Q	Q												

							S	P					S																		
47 000							S	P					S																		
68 000								S																							
100 000								S																							
150 000								S																							
误差 (%) Tolerance (%)	±10 ±20	±20 +80/-20	±10 ±20	±20 +80/-20	±10 ±20	±20 +80/-20	±10 ±20	±20 +80/-20	±10 ±20	±20 +80/-20	±10 ±20	±20 +80/-20	±10 ±20	±20 +80/-20	±10 ±20	±20 +80/-20	±10 ±20	±20 +80/-20	±10 ±20	±20 +80/-20	±10 ±20	±20 +80/-20	±10 ±20	±20 +80/-20	±10 ±20	±20 +80/-20	±10 ±20	±20 +80/-20	±10 ±20	±20 +80/-20	
T, mm max.	3.0		3.5			4.0			4.5			5.0			6.0																
F, ±0.8mm	2.5 / 5.0			5.0			5.0 / 7.5			7.5 / 10.0			7.5 / 10.0			10.0															
D, ±0.05mm	0.40		0.45			0.50			0.50			0.55			0.60																
L, mm min.	脚长可以根据客户需求订制（没有要求时，酚醛包封脚长不小于 16mm；环氧树脂包封脚长不小于 20mm） Lead length by customer requirements (No requirement: 16mm min. by Phenolic resin coating; 20mm min. by Epoxy resin coating).																														
包封 Coating	酚醛树脂 Phenolic resin		酚醛或环氧树脂 Phenolic resin Epoxy resin			环氧树脂 Epoxy resin			环氧树脂 Epoxy resin			环氧树脂 Epoxy resin			环氧树脂 Epoxy resin																

代码 Code	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
D, mm max.	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	18.0	20.0	22.0	25.0