

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

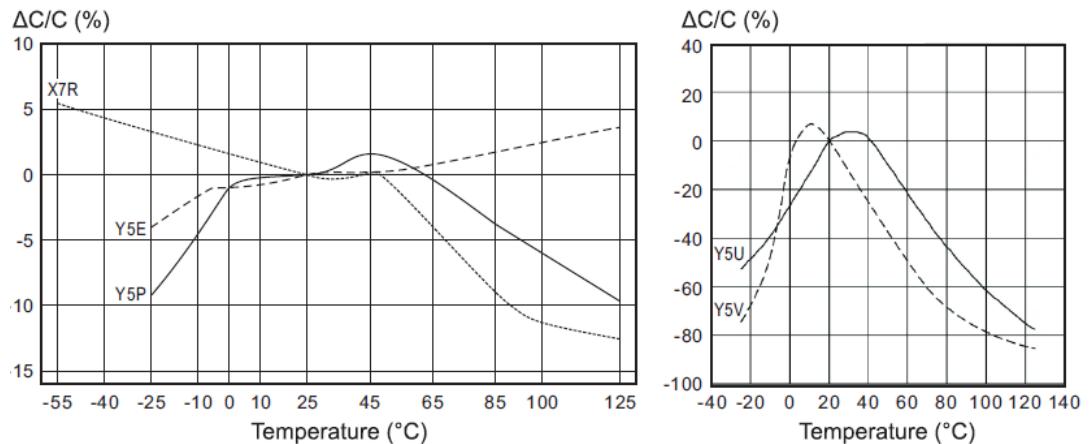
- By-pass and coupling
- Frequency discriminating circuits where Q and stability of capacitance characteristic are not major importance

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_R) Capacitance (C_R)	Range: 100pF to 0.1uF Tolerance: K($\pm 10\%$), M($\pm 20\%$), 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($\tan\delta$) Tangent of loss angle ($\tan\delta$)	≤ 0.035 测量条件同“电容量(C_R)” Measured condition see “Capacitance (CR)”
额定电压(U_R), DC Rated Voltage (U_R), DC	50V to 6 300V 在两导线间施加下列电压, 时间 1s 到 5s (充/放电流小于 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 $\leq 50\text{mA}$) $< 630\text{V}, 2.5U_R$ $\geq 630\text{V}, 1.5U_R+500\text{V}$
绝缘电阻 Insulation Resistance	$> 6\ 000\text{M}\Omega$ 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				
	Y5P	X7R	Y5U	Y5V	Y5P	X7R	Y5U	Y5V	Y5P	X7R	Y5U	Y5V	Y5P	X7R	Y5U	Y5V	Y5P	X7R	Y5U	Y5V	Y5P	X7R	Y5U	Y5V	
100					C								D				D				D				
120					C								D				D				D				
150					C								D				D				D				
180					C								D				D				D				
220	B	B	B		C	C			C				D				D				D				
270	B	B	B		C	C			C				D				D				D				
330	B	B	B		C	C			C				D				D				D				
390	B	B	B		C	C			C				D				D				F				
470	B	B	B		C	C			C	D	D		D				E				F			D	
560	B	B	B		C	C			C	D	D		F				F				G			D	
680	B	B	B		C	C			C	D	D		G				G				H			E	
820	B	B	B		C	C			C	D	D		G				H				I			F	
1000	B	B	B		C	C	C		D	D	C		G				I				K			D	
1200	B	B	B		E	D	C		F	F	D		I				K				L			F	
1500	B	B	B		E	E	C		F	F	D		I				L				M			F	
1800	C	C	C		G	F	C		I	J	D		G				M				N			G	
2200	C	C	B	B	G	H	C	C	I	K	F		K				N				I			I	
2700	E	E	B	B	G	H	E	C	J	L	F		L				F				K			J	
3300	E	E	B	B	I	K	E	E	N	L	F		O				G				K			K	
3900	F	F	B	B	I	K	E	E	N	L	G		O				H				L			O	
4700	G	G	B	B	K	L	G	E	N	O	I		Q				K				O			N	
5600	H	H	C	D	B	B	H	E	O	O	K		S				L				O			N	
6800	J	J	D	B	M	M	H	G	P	O	K		S				N				O			O	
8200	L	L	E	C	N	N	K	I	S	S	N		O				O				P			S	
10000	L	L	E	C	N	N	K	I	S	S	N		O				O				P			S	
15000					G	J					Q		Q												
22000																									
33000																									

WEIDY®

47 000				S	P			S																
68 000				S																				
100 000				S																				
150 000																								
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		
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													
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				