



鼎格國際有限公司

產品目錄

SMD series 晶片型

Resistors 電阻器

- General 一般電阻
- High Power 高功率電阻
- Low Ohmic 低阻電阻
- High Precision 高精密度電阻
- High Voltage 高壓電阻

Capacitor 電容器

- General 一般電容
- Safety 安規電容(X1Y2/X2Y3)
- High/Medium Voltage 中/高壓電容(100V~3000V)

Dide 二極體

Schottky 蕭特基(1A~6A)(Low Vf)

Power Choke

Leaded series 插件型

Resistors 電阻

- Mini Ohmic 低阻電阻
- Carbon Film 碳膜電阻
- Wire Wound 繞線電阻
- Metal Film 金屬膜電阻
- Metal Oxide Film 金屬氧化皮膜電阻

Capacitor 電容

- Safety 安規電容(X1Y1/X1Y2)
- Ceramic Disc Capacitors 陶瓷電容

Dide 二極體

Schottky 蕭特基(1A~16A)

Power Chok

SMD series 晶片型

Capacitor 電容器 - General 一般電容

Dielectric	NP0	X7R	Y5V
Size	0402, 0603, 0805, 1206, 1210, 1812	0402, 0603, 0805, 1206, 1210, 1812, 2220, 2225	0402, 0603, 0805, 1206, 1210, 1812
Capacitance Range *	0.5pF to 39 nF	100pF to 2.2μF	10nF to 1.0μF
Capacitance Tolerance	Cap≤5pF: B (±0.1pF), C (±0.25pF) 5pF<Cap<10pF: C (±0.25pF), D (±0.5pF) Cap≥10pF: F (±1%), G (±2%), J (±5%), K (±10%)	J (±5%), K (±10%), M (±20%)	M (±20%), Z (-20/+80%)
Rated Voltage (WVDC)	16V, 25V, 50V	10V, 16V, 25V, 50V	
Tan δ*	Cap<30pF: Q≥400+20C Cap≥30pF: Q≥1000	Note 1	
Insulation resistance at Ur	≥10G Ω	≥10G or RxC≥100 xF whichever is less	
Operating Temperature	-55 to +125°C		-25 to +85°C
Capacitance Characteristic	±30ppm	±15%	+30/-80%
Termination	Cu (or Ag)/Ni/Sn (lead-free termination)		

* Measured at the condition of 30~70% related humidity.

COG(NP0): Apply 1.0±0.2Vrms, 1.0MHz±10% for Cap≤1000pF and 1.0±0.2Vrms, 1.0kHz±10% for Cap>1000pF, 25°C at ambient temperature

X7R: Apply 1.0±0.2Vrms, 1.0kHz±10%, at 25°C ambient temperature.

Y5V: Apply 1.0±0.2Vrms, 1.0kHz±10%, at 20°C ambient temperature

Note1:

X7R

Rated vol.	D.F.	Exception of D.F.
≥50V	≤2.5%	≤3% 0603≥0.047μF; 0805≥0.18μF, 1206≥0.47μF
25V	≤3.5%	≤5% 0805≥1μF; 1210≥10μF
		≤7% 0603≥0.33μF
16V	≤3.5%	≤5% 0402≥0.033μF; 0603≥0.15μF; 0805≥0.68μF; 1206≥2.2μF
		≤10% 1210≥22μF; 0603≥0.68μF
10V	≤5.0%	≤10% 0603≥1μF; 0805≥2.2μF

Y5V

Rated vol.	D.F.	Exception of D.F.
≥50V	≤5.0%	7.0% 0603≥0.1μF; 0805≥0.47μF
25V	≤5.0%	≤7% 0402≥0.047μF; 0603≥0.1μF; 0805≥0.33μF; 1206≥1μF
		≤9% 0402≥0.068μF; 0603≥0.47μF
16V (C<1.0μF)	≤7.0%	≤9% 0402≥0.068μF; 0603≥0.68μF
16V (C≥1.0μF)	≤9.0%	≤12.5% 0805≥4.7μF; 1206≥10μF; 1210≥22μF; 1812≥47μF
10V	≤12.5%	---

SMD series 晶片型

Capacitor 電容器 - Safety 安規電容(X1Y2/X2Y3)

Dielectric	NP0		X7R	
Size	1808, 1812, 2211		1808, 1812, 2211, 2220	
Rated voltage (WVDC)	250 Vac		250 Vac	
Capacitance Range *	X1Y2 Class(Impulse 6KV)	4pF ~ 100pF	X1Y2 Class	100pF ~ 4700pF
	X1Y2 Class(Impulse 5KV)	3.0pF ~ 720pF	X2Y3 Class	150pF ~ 4700pF
	X2Y3 Class	3.0pF ~ 1000pF		
Capacitance Tolerance	Cap≤5pF: C (±0.25pF) 5pF<Cap<10pF: C (±0.25pF), D (±0.5pF) Cap≥10pF: J (±5%), K (±10%)		K (±10%), M(±20%)	
Tan δ*	Cap<30pF : D.F 1/(400+20C)		≤2.5%	
	Cap 30pF : D.F 0.10%			
Insulation resistance at Ur	≥100GΩ or RXC≥ 1000 whichever is smaller		≥100GΩ or RXC≥ 500Ω-F whichever is smaller	
Operating Temperature	-55 to +125°C			
Capacitance Characteristic	±30ppm		±15%	
Termination	Ag/Ni/Sn (lead-free termination)			

* NP0: Apply 1.0±0.2Vrms, 1.0MHz±10%, at 25°C ambient temperature

X7R: Apply 1.0±0.2Vrms, 1.0kHz±10%, at 25°C ambient temperature.

SMD series 晶片型

Capacitor 電容器 - High/Medium Voltage 中/高壓電容 (100V~3000V)

Medium Voltage Series (100V~630V)

Dielectric	NPO	X7R	Y5V
Size	0402, 0603, 0805, 1206, 1210, 1812	0603, 0805, 1206, 1210, 1808, 1812, 1825, 2220, 2225	0805, 1206, 1210, 1812
Capacitance Range *	0.5pF to 33 nF	100pF to 1.0 μ F	10nF to 1.0 μ F
Capacitance Tolerance	Cap \leq 5pF: B (\pm 0.1pF), C (\pm 0.25pF) 5pF<Cap<10pF: C (\pm 0.25pF), D (\pm 0.5pF) Cap \geq 10pF: F (\pm 1%), G (\pm 2%), J (\pm 5%), K (\pm 10%)	J(\pm 5%), K (\pm 10%), M(\pm 20%)	Z (-20/+80%)
Rated Voltage (WVDC)	100V, 200V, 250V, 500V, 630V	100V, 200V, 250V, 500V, 630V	100V, 200V, 250V
Tan δ *	Cap<30pF: Q \geq 400+20C Cap \geq 30pF: Q \geq 1000	\leq 2.5%	\leq 5%
Insulation resistance at Ur	\geq 100G Ω or RXC \geq 1000 whichever is smaller	\geq 10G or RxC \geq 1000 Ω -F whichever is smaller	
Operating Temperature	-55 to +125 $^{\circ}$ C		-25 to +85 $^{\circ}$ C
Capacitance Characteristic	\pm 30ppm	\pm 15%	+30/-80%
Termination	Cu (or Ag)/Ni/Sn (lead-free termination)		

* Measured at the condition of 30~70% related humidity.

NPO: Apply 1.0 \pm 0.2Vrms, 1.0MHz \pm 10% for Cap \leq 1000pF and 1.0 \pm 0.2Vrms, 1.0kHz \pm 10% for Cap>1000pF, 25 $^{\circ}$ C at ambient temperature

X7R: Apply 1.0 \pm 0.2Vrms, 1.0kHz \pm 10%, at 25 $^{\circ}$ C ambient temperature.

Y5V: Apply 1.0 \pm 0.2Vrms, 1.0kHz \pm 10%, at 20 $^{\circ}$ C ambient temperature.

**Measured at 500VDC for 60 sec, for UR>500VDC

High Voltage Series (1KV~3KV)

Dielectric	NPO	X7R
Size	1206, 1210, 1808, 1812	1206, 1210, 1812, 1808, 1825, 2220, 2225
Rated Voltage (WVDC)	1KV, 2KV, 3KV	1KV, 2KV, 3KV
Capacitance Range *	1KV 1.5pF ~ 2.2nF 2KV 1.5pF ~ 1.2nF 3KV 2.2pF ~ 470pF	1KV 100pF ~ 100nF 2KV 150pF ~ 12nF 3KV 150pF ~ 3.9nF
Capacitance Tolerance	Cap \leq 5pF: B (\pm 0.1pF), C (\pm 0.25pF) 5pF<Cap<10pF: C (\pm 0.25pF), D (\pm 0.5pF) Cap \geq 10pF: F (\pm 1%), G (\pm 2%), J (\pm 5%), K (\pm 10%)	J(\pm 5%), K (\pm 10%), M(\pm 20%)
Tan δ *	Cap<30pF: Q \geq 400+20C Cap \geq 30pF: Q \geq 1000	\leq 2.5%
Insulation resistance at Ur	\geq 100G Ω or RXC \geq 1000 whichever is smaller	\geq 10G or RxC \geq 5000 Ω -F whichever is smaller
Operating Temperature	-55 to +125 $^{\circ}$ C	
Capacitance Characteristic	\pm 30ppm	\pm 15%
Termination	Cu (or Ag)/Ni/Sn (lead-free termination)	

* Measured at the condition of 30~70% related humidity.

NPO: Apply 1.0 \pm 0.2Vrms, 1.0MHz \pm 10% for Cap \leq 1000pF and 1.0 \pm 0.2Vrms, 1.0kHz \pm 10% for Cap>1000pF, 25 $^{\circ}$ C at ambient temperature

X7R: Apply 1.0 \pm 0.2Vrms, 1.0kHz \pm 10%, at 25 $^{\circ}$ C ambient temperature.

Leaded series 插件型

Capacitor 電容 - Safety 安規電容(X1Y1/X1Y2)

Class I

Temperature Characteristics	NPO	N750	SL
Operating Temperature Range	-55°C ~ + 125°C		
Capacitance Range	0.5pF~1000pF @1± 0.1 MHz, 1.0~3.0 Vrms,± 25°C		
Q Factor	C ≤ 30pF= =>Q ≥ 400+20C, C ≥ 30pF= =>Q ≥ 1000		
Test Voltage(50mA Max.)	W.V<1KV = = >2.5Time of Rated Voltage for 1~5sec W.V<1KV = = >2.0Time of Rated Voltage for 1~5sec		
Insulation Resistances	10,000MΩ min. measured@W.V.DC,but not exceeding 500VDC		
Temperature Coefficient(ppm/ °C) (-25 °C~+85 °C)	0± 60	-750± 120	350~- 1000

Class II

Temperature Characteristics	Y5P	Y7R	Z5U	Z5V
Operating Temperature Range	-25°C ~ + 85°C	-55°C ~ + 125°C	-10°C ~ + 85°C	-10°C ~ + 85°C
Capacitance Range	100pF~1000pF @1± 0.1 MHz, 1.0~3.0 Vrms,± 25°C			
Dissipation Factor	2.5% Max.	2.5% Max.	5.0% Max.	5.0% Max.
Test Voltage(50mA Max.)	W.V<1KV = = >2.5Time of Rated Voltage for 1~5sec W.V<1KV = = >2.0Time of Rated Voltage for 1~5sec			
Insulation Resistances	10,000MΩ min. measured@W.V.DC,but not exceeding 500VDC			
Capacitance Change Over Temperature Range	± 10% (-25°C ~ + 85°C)	± 15% (-55°C ~ + 125°C)	± 22%, -56% (-10°C ~ + 85°C)	± 22%, -82% (-10°C ~ + 85°C)

Class III

Temperature Characteristics	Y5R	Y5U	Y5V
Operating Temperature Range	-25°C ~ + 85 °C		
Capacitance Range	0.01μF~0.22μF @1± 0.1 KHz, 0.1Vrms 25°C		
Dissipation Factor	2.5% Max.	2.5% Max.	5.0% Max.
Test Voltage(50mA Max.)	2.5Time of Rated Voltage for 1~5sec		
Insulation Resistances	W.V ≤ 16VDC = = >100MΩ Min. measured@W.V.DC W.V ≥ 25VDC = = >1,000MΩ Min. measured@W.V.DC		
Capacitance Change Over Temperature Range	± 15% (-25°C ~ + 85°C)	± 22%, -56% (-25°C ~ + 85°C)	± 22%, -82% (-25°C ~ + 85°C)

Leaded series 插件型

Capacitor 電容 - Ceramic Disc Capacitors 陶瓷電容

Characteristics	Type JN/JNA	Type JY	Type JR
Capacitance Range	100pF to 4700pf	100pF to 10000pF	5.1pF to 1500pF
Operating Temperature Range	-25°C to 125 °C	-25°C to 125 °C	-55°C to 125 °C
Rated Voltage	X1: 440VAC, Y1: 250VAC / 400VAC	X1: 440VAC, Y2: 250VAC	X1: 440VAC, Y2: 250VAC
Dielectric Withstanding Volt.	4000 VAC for 1 minute	2600 VAC for 1 minute	2600VAC for 1 minute
Capacitance	Within the specified tolerance when measured at 1KHz $\pm 20\%$ (Y5P, Y5U, Y5V, X7R), 1MHz $\pm 20\%$ (COG), 1Vrms and 25°C		
Dissipation Factor(tan)	tan <2.5% for char , Y5P, Y5U, Y5V, X7R when measured at 1KHz $\pm 20\%$ 1Vrms and 25 °C Quality Factor> 300 for char. .COG when measured at 1MHz $\pm 20\%$ 1Vrms and 25 °C		
Insulation Resistance	10,000 M Ω min. at 500 VDC		
Certificated Body	UL/CAS/FIMKO/DEMKO/DEMKO/SEMKO/NEMKO/SEV/VDE/CB/ENEC 10/CQC(CHINA)		
AC Rated Voltage	JNA TYPE:	Class X1: 440 VAC Y1: 400 VAC UL, CSA: 250 VAC	
	JN TYPE:	Class X1: 400 VAC Y1: 250 VAC UL, CSA: 250 VAC	
	JY TYPE:	Class X1: 400 VAC Y2: 250 VAC UL, CSA: 250 VAC	
	JR TYPE:	Class X1: 400 VAC Y2: 250 VAC UL, CSA: 250 VAC	