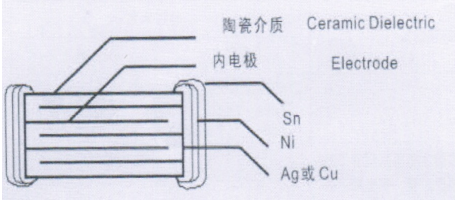
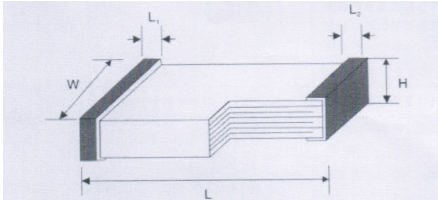


MLCC

0201
0402
0603
0805
1206
1210



結構與外形尺寸



片式多層陶瓷電容器外形與內部結構

Dimension and Cross-section of MLCC

Type	長度 L/mm	寬度 W/mm	厚度（最小值/最大值） H(Min/Max)/mm	端頭寬度（最小值/最大值） L ₁ (Min/Max)/mm
0201 (0603)	0.6±0.03	0.3±0.03	0.27/0.33	0.05/0.20
0402 (1005)	1.0±0.05	0.5±0.05	0.45/0.55	0.10/0.35
0603 (1608)	1.6±0.10	0.8±0.10	0.70/0.90	0.15/0.60
0805 (2012)	2.0±0.20	1.25±0.20	0.50/1.45	0.20/0.75
1206 (3216)	3.2±0.20	1.6±0.20	0.50/1.80	0.25/0.75
1210 (3225)	3.2±0.20	2.5±0.20	1.15/2.70	0.25/0.75

	NPO	X7R	X5R	Y5V
Rated Voltage 額定電壓	6.3VDC~3000VDC			
Capacitance Range 電容量範圍	1pF to 100uF			
Capacitance Tolerance 電容誤差	B=±0.1pF C=±0.25pF D=±0.5pF F=±1% G=±2% J=±5%	J=±5% K=±10% M=±20% Z=+80%~-20%	J=±5% K=±10% M=±20% Z=+80%~-20%	M=±20% Z=+80%~-20%
Note: B,C,D:Cap. < 10pF F,G,J,K,M,Z:Cap. ≥ 10pF				
Operating Temperature 操作溫度	-55℃~+125℃	-55℃~+125℃	-55℃~+85℃	-25℃~+85℃
Capacitance Change 電容量變化	0±30ppm/℃	±15%	±15%	+30%~-80%
Capacitance Test: @25℃ or referred to +25℃ 電容量測試	1.0Vrms±0.2,1kHz±10% 1.0Vrms±25,1MHz±10% for capacitance ≤ 1000pF	1.0Vrms±0.2,1kHz±10%	1.0±0.2Vrms,1kHz±10%	1.0Vrms±0.2,1kHz±10%
Q/Dissipation Factor 損耗因數	C < 30pF:Q ≥ 400+20 C C ≥ 30pF:Q ≥ 1000 0.1% Max.	≥50V:2.5%~3% 25V:≤3.5%~10% 16v:≤3.5%~10% 10V:≤5%~10% 6.3V:≤10%~15%	≥50V:2.5%~3% 25V:≤3.5%~10% 16v:≤3.5%~10% 10V:≤5%~10% 6.3V:≤10%~15%	≥50V:5%~7% 25V:≤5%~9% 16v:≤7%~12.5% 10V:≤12.5% 6.3V:≤20%
Insulation Resistance 絕緣阻抗	10GΩ or 500MΩ.uF, whichever is less at 25℃			
Dielectric Strength 耐電壓	≤50V 51V~100V 200V~300V 500V~990V 1000V~3000V	250% of rated voltage for 5 seconds at 50mA 300% of rated voltage for 5 seconds at 10mA 200% of rated voltage for 5 seconds at 10mA 150% of rated voltage for 5 seconds at 10mA 120% of rated voltage for 5 seconds at 10mA		

Size UR		Capacitance			
		COG	X7R	X5R	Y5V
0201	50V	0.47pF~10pF	220pF~1.2nF		
	25V	15nF~68nF	1.0nF~3.9nF		
	16V	56pF~100pF	3.9nF~12nF		
	10V			15nF~68nF	
	6.3V			47nF~220nF	
0402	50V	0.47pF~510pF	100pF~10nF		
	25V	100pF~1000pF	100pF~0.47uF	22nF~0.1uF	0.01uF~0.22uF
	16V	560pF~1000pF	0.047uF~0.1uF	22nF~0.1uF	0.01uF~0.22uF
	10V			0.1uF~1.0uF	0.1uF~1uF
	6.3V			0.1uF~2.2uF	1uF
0603	50V	0.47pF~3300pF	100pF~0.1uF		0.01uF~0.33uF
	25V	1000pF~4700pF	100pF~0.22uF	0.22uF~1uF	0.33uF~1.0uF
	16V	3300pF~4700pF	0.22uF~1.0uF	0.22uF~1uF	0.1uF~2.2uF
	10V	5600pF~10000pF		0.22uF~2.2uF	1.0uF~2.2uF
	6.3V			1.0uF~10uF	1.0uF~4.7uF
0805	50V	1.0nF~10nF	0.10uF~0.33uF	0.22uF~0.47uF	0.1uF~1uF
	25V	1.0nF~10nF	0.33uF~1.5uF	0.22uF~2.2uF	0.1uF~2.2uF
	16V	5.6nF~33nF	1.0uF~2.2uF	0.33uF~4.7uF	0.1uF~10uF
	10V			1.0uF~4.7uF	1uF~10uF
	6.3V			1.0uF~47uF	1uF~22uF
1206	50V	0.82nF~33nF	1uF	1uF~2.7uF	
	25V	8.2nF~100nF	1uF~4.7uF	1uF~10uF	1uF~10uF
	16V	6.8nF~100nF	1uF~4.7uF	1uF~10uF	1uF~10uF
	10V			1uF~10uF	1uF~22uF
	6.3V			2.2uF~100uF	1uF~47uF
1210	50V			1uF~4.7uF	
	25V			1uF~47uF	1uF~22uF
	16V	8.2nF~100nF		5.6uF~100uF	1uF~22uF

Power Sky (HK) Limited