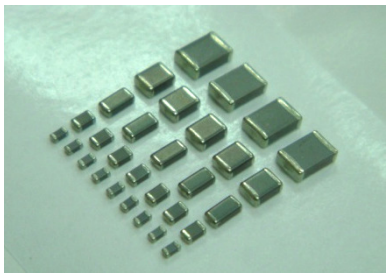
Holy Stone

Multilayer Ceramic Chip Capacitors [High Cap. NP0]

HCN Series



Replacement for Film Capacitor

◆ Features

- ❑ Small size & high Capacitance
- ❑ Suitable for wave and reflow soldering
- ❑ Excellent characteristics and tight tolerances
- ❑ Excellent Bias, high temperature stability & low Tan δ
- ❑ Replace Film Capacitors
- ❑ RoHS compliant

◆ Applications

- ❑ Suitable for ADSL filter circuits, cable Modem and coupling circuits, general Telecommunication use, power (Inverter for oscillation circuit) and audio circuit

◆ Summary of Specifications

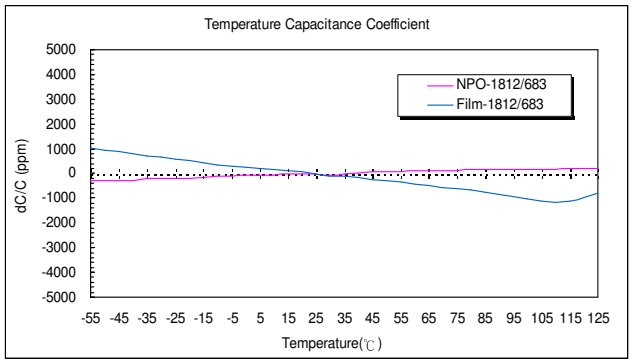
Operation Temperature	-55 ℃ ~ +125 ℃
Rated Voltage	16Vdc to 50Vdc
Temperature Coefficient	NP0 : ≤ 30ppm/ ℃ , -55 ℃ ~ +125 ℃ (EIA Class Ⅰ)
Capacitance Range	1nF ~ 120nF
Dissipation Factor	Q ≥1000 at 1KHz 20 ℃
Insulation Resistance	10GΩ or 500/C Ω whichever is smaller (C in Farad)
Dielectric Strength	250% Rated Voltage for 5 second @ 50mA max. current
Aging	0% per decade hr.

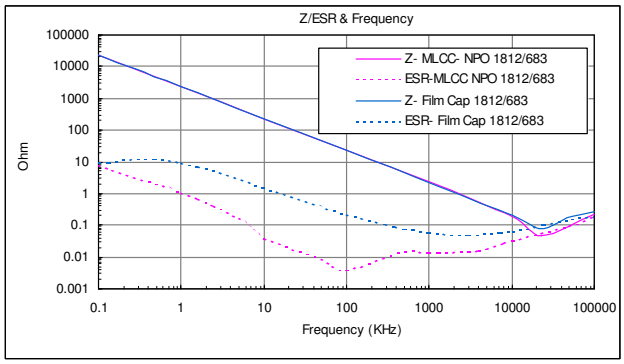
◆ How To Order

C	1206	N	103	J	025	T

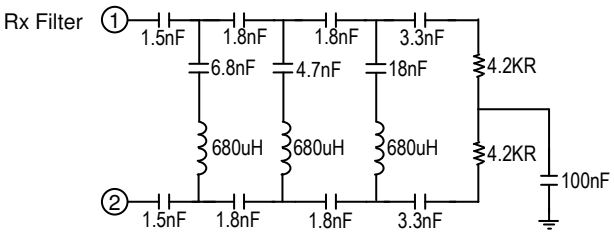
Product Code	Chip Size	Dielectric	Capacitance Unit : pF	Tolerance	Rated Voltage	Packaging
C: MLCC (Multilayer Ceramic Chip of Capacitor)	Ex.: 0603 0805 1206 1210 1812	N: NP0	Ex.: 102 : 10×10^2 103 : 10×10^3 124 : 12×10^4	Ex.: F : +/- 1% G : +/- 2% J : +/- 5%	Ex.: 016:16Vdc 025:25Vdc 050:50Vdc	T: T&R 7” R: T&R 13” B: Bulk

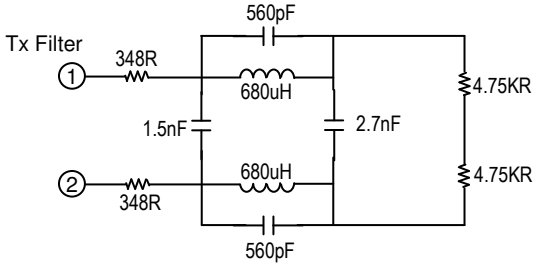
◆ Characteristics





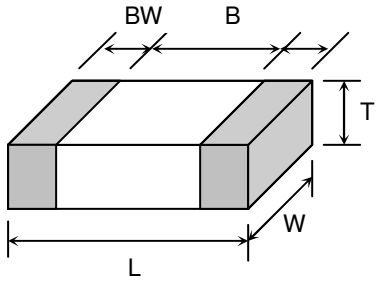
◆ Application Example Circuits





◆ Dimensions

Unit : mm [inches]



TYPE	L	W	T (max)	B (min)	BW (min)
0603	1.60±0.10 [.063±.004]	0.80±0.10 [.031±.004]	0.95 [.037]	0.40 [.016]	0.15 [.006]
0805	2.00±0.20 [.079±.008]	1.25±0.20 [.049 ±.008]	1.45 [.057]	0.70 [.028]	0.20 [.008]
1206	3.20±0.30 [.126±.012]	1.60±0.20 [.126±.008]	1.80 [.071]	1.50 [.059]	0.30 [.012]
1210	3.20±0.30 [.126±.012]	2.50±0.20 [.098±.008]	2.20 [.087]	1.60 [.063]	0.30 [.012]
1812	4.60±0.30 [.181±.012]	3.20±0.30 [.126±.012]	2.20 [.087]	4.00 [.157]	0.30 [.012]

◆ Capacitance Range

Dielectric Characteristic	Size	Voltage	Capacitance Range: 102 122 152 182 222 272 332 392 472 562 682 822 103 123 153 183 223 273 333 393 473 563 683 823 104 124 154 224
NPO	0603	16V	B B B B B B B
		25V	B B B B B B B
		50V	B B B B B B B
	0805	16V	B B B B C/D D D D D D D D
		25V	B B B B C/D D D D D D D D
		50V	B B B B C/D D D D D D D D
	1206	16V	B B B B B B B B B B B B B D D D D D E E
		25V	B B B B B B B B B B B B B D D D D D E E
		50V	B B B B B B B B B B B B B D D D D D E E
	1210	16V	C C C C C C C C C C C C C D D D D D E E E
		25V	C C C C C C C C C C C C C D D D D D E E E
		50V	C C C C C C C C C C C C C D D D D D E E E
	1812	16V	D D D D D D D D D D D D D D D D E E E E F F F F F F
		25V	D D D D D D D D D D D D D D D D E E E E F F F F F F
		50V	D D D D D D D D D D D D D D D D E E E E F F F F F F

Symbol Code	S	O	A	B	C	D	E	F
Thickness(mm)	0.3±0.03	0.5±0.05	0.6±0.1	0.85±0.1	1.0±0.1	1.25±0.2	1.6±0.2	2.0±0.2

▪ ***Other dimensions, capacitance values and voltages rating are available. Please contact Holy Stone.***