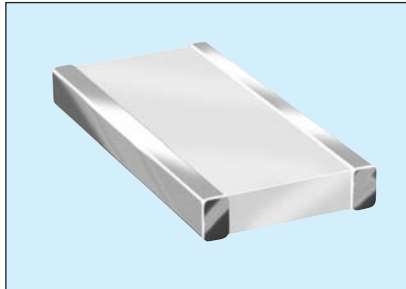


Low Inductance Capacitors (SnPb)

LICC 0612/0508/0306 X7R & X5R Dielectric



The total inductance of a chip capacitor is determined both by its length to width ratio and by the mutual inductance coupling between its electrodes.

Thus a 1210 chip size has a lower inductance than a 1206 chip. This design improvement is the basis of AVX's Low Inductance Chip Capacitors (LICC), where the electrodes are terminated on the long side of the chip instead of the short side. The 1206 becomes an 0612, in the same manner, an 0805 becomes an 0508, an 0603 becomes an 0306. This results in a reduction in inductance from the 1nH range found in normal chip capacitors to less than 0.2nH for LICCs. Their low profile is also ideal for surface mounting (both on the PCB and on IC package) or inside cavity mounting on the IC itself.



Check for up-to-date CV Tables at <http://www.avx.com/docs/catalogs/licc.pdf>

HOW TO ORDER

LD18

Size
LD16
LD17
LD18

Z

Voltage
6 = 6.3V
Z = 10V
Y = 16V
3 = 25V
5 = 50V

D

Dielectric
C = X7R
D = X5R

105

Capacitance Code (In pF)
2 Sig. Digits + Number of Zeros

M

Capacitance Tolerance
K = ±10%
M = ±20%

A

Failure Rate
A = N/A

B

Terminations
B = 5% min lead

2

Packaging Available
2 = 7" Reel
4 = 13" Reel

A

Thickness
Thickness
mm (in)
0.56 (0.022)
0.61 (0.024)
0.76 (0.030)
1.02 (0.040)
1.27 (0.050)

NOTE: Contact factory for availability of Termination and Tolerance Options for Specific Part Numbers.

SIZE	LD16					LD17					LD18				
Soldering	Reflow Only					Reflow Only					Reflow/Wave				
Packaging	All Paper					All Paper					Paper/Embossed				
(L) Length	0.81 ± 0.15 (0.032 ± 0.006)					1.27 ± 0.25 (0.050 ± 0.010)					1.60 ± 0.25 (0.063 ± 0.010)				
(W) Width	1.60 ± 0.15 (0.063 ± 0.006)					2.00 ± 0.25 (0.080 ± 0.010)					3.20 ± 0.25 (0.126 ± 0.010)				
WVDC	6.3	10	16	25	50	6.3	10	16	25	50	6.3	10	16	25	50
Cap (pF)	1000	A	A	A	A	S	S	S	S	V	S	S	S	S	V
	2200	A	A	A	A	S	S	S	S	V	S	S	S	S	V
	4700	A	A	A	A	S	S	S	S	V	S	S	S	S	V
Cap (µF)	0.010	A	A	A	A	S	S	S	S	V	S	S	S	S	V
	0.015	A	A	A	A	S	S	S	S	V	S	S	S	S	V
	0.022	A	A	A	A	S	S	S	S	V	S	S	S	S	V
	0.047	A	A	A	A	S	S	S	V	A	S	S	S	S	V
	0.068	A	A	A	A	S	S	S	A	A	S	S	S	S	V
	0.10	A	A	A	A	S	S	V	A	A	S	S	S	V	W
	0.15	A	A	A	A	S	S	V	A	A	S	S	S	S	V
	0.22	A	A	A	A	S	S	A	A	A	S	S	V	A	W
	0.47	A	A	A	A	V	V	A	A	A	S	S	V	A	W
	0.68	A	A	A	A	A	A	A	A	A	V	V	W	A	W
	1.0	A	A	A	A	A	A	A	A	A	V	V	W	A	W
	1.5	A	A	A	A	A	A	A	A	A	W	W	A	A	W
	2.2	A	A	A	A	A	A	A	A	A	A	A	A	A	W
	3.3	A	A	A	A	A	A	A	A	A	A	A	A	A	W
	4.7	A	A	A	A	A	A	A	A	A	A	A	A	A	W
	10	A	A	A	A	A	A	A	A	A	A	A	A	A	W
WVDC	6.3	10	16	25	50	6.3	10	16	25	50	6.3	10	16	25	50
SIZE	0306					0508					0612				

0306		0508		0612	
Code	Thickness	Code	Thickness	Code	Thickness
A	0.61 (0.024)	S	0.56 (0.022)	S	0.56 (0.022)
		V	0.76 (0.030)	V	0.76 (0.030)
		A	1.02 (0.040)	W	1.02 (0.040)
				A	1.27 (0.050)

Solid = X7R = X5R