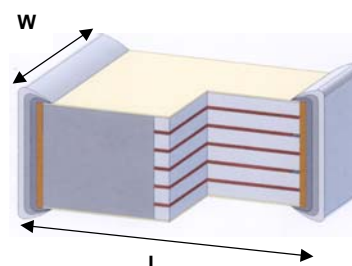
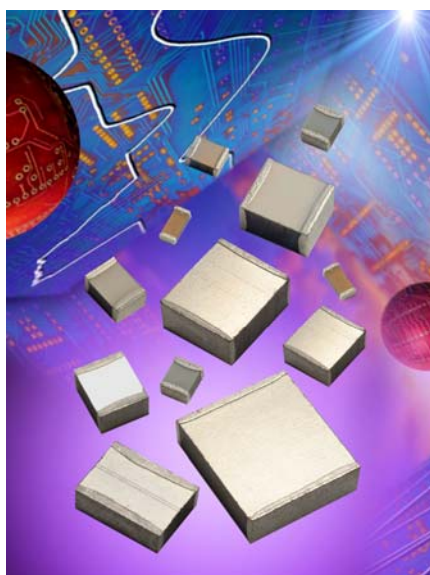


Film Chip Capacitors Lead Free Version



Dimensions & How to order - CB Serie

NEW



DIMENSIONS mm (inches)

Size Code	Equivalent size	Length (L) mm (inches)	Width (W) mm (inches)
01	1206	3,2+/-0,30 (0,126+/-0,012)	1,6+/-0,30 (0,063+/-0,012)
02	1210	3,2+/-0,30 (0,126+/-0,012)	2,5+/-0,30 (0,098+/-0,012)
03	1812	4,5+/-0,50 (0,177+/-0,020)	3,2+/-0,50 (0,126+/-0,02)
04	2220	5,7+/-0,50 (0,224+/-0,02)	5,0+/-0,50 (0,197+/-0,02)
05	2824	7,1+/-0,50 (0,28+/-0,02)	6,1+/-0,50 (0,24+/-0,02)
16	4030	10,2+/-0,60 (0,401+/-0,024)	7,6+/-0,80 (0,299+/-0,031)
17	5040	12,7+/-0,60 (0,5+/-0,024)	10,2+/-0,80 (0,401+/-0,031)
18	6064	15,2+/-0,60 (0,598+/-0,024)	13,7+/-0,80 (0,539+/-0,031)

HOW TO ORDER

CB	18	2	G	0105	K	--
Type	Size	Dielectric	Voltage	Capacitance	Tolerance EIA code	Suffix packaging
CB :SMD lead free	01 : 1206 02 : 1210 03 : 1812 04 : 2220 05 : 2824 16 : 4030 17 : 5040 18 : 6054	2 = PET-HT 8 = PPS 7 = PEN	16V = B 25V = C 50/63V = D 100V = E 250V = G 400V = I 630V = K	1st digit : 0 2nd& 3rd: the 2nd significant figures of the capacitance value. 4th digit : the number of zeros to be added to the capacitance value.	2% = G (1) 5% = J 10% = K	-- = bulk BA = tape & reel diameter : 180mm BC = tape & reel diameter : 330mm

Example of an order : how to order a chip film PET-HT 1µF +/-10% 250V bulk packaging

(1) : tolerance G available only for PPS Series

Film Chip Capacitors Lead Free Version

PPS DIELECTRIC - CB Serie



NEW



PERFORMANCE CHARACTERISTICS

Climatic Category	55/125/56
Capacitance Range	1nF to 100nF
Tolerance on C _R	+/-2% , +/-5% , +/-10%
Nominal Voltages	16Vdc to 50Vdc
Test Voltage	1,4Vr 2s to 25°C
Soldering methods	IR or vapor phase reflow
Tangent of Loss Angle :D.F	< 50 x10 ⁻⁴
Insulation resistance minimum : IR	IR > 1000 MΩ
Temperature range	--55°C to +125°C

CAPACITANCE VALUES AND NOMINAL VOLTAGE vs size

PPS version				
Capacitance Range (CR)	VOLTAGE 16V		VOLTAGE 50V	
	Ordering code	Size	Ordering code	Size
1000pF	CB018B0102+--	1206	CB018D0102+--	1206
2200	CB018B0222+--	1206	CB018D0222+--	1206
4700	CB018B0472+--	1206	CB018D0472+--	1206
6800	CB018B0682+--	1206	CB018D0682+--	1206
10nF	CB018B0103+--	1206	CB018D0103+--	1206
12	CB018B0123+--	1206	CB028D0123+--	1210
22	CB018B0223+--	1206	CB028D0223+--	1210
33	CB018B0333+--	1206	CB028D0333+--	1210
39	CB018B0393+--	1206	CB028D0393+--	1210
47	CB028B0473+--	1210	CB038D0473+--	1812
68	CB028B0683+--	1210	CB038D0683+--	1812
100	CB028B0104+--	1210	CB038D0104+--	1812

Replace the + by the tolerance code : G=2% or J=5% or K=10%

Replace the -- by the packaging suffix : -- = bulk

BA = tape & reel

MOUNTING AND SOLDERING

* Reflow soldering referring to Jedec Standard with some limitations

* Profile limits : 90s at temperature > 217°C

T max= 260°C and 10 s between T max and Tmax-5°C

* JEDEC J-Std 020C

Film Chip Capacitors Lead Free Version

PEN DIELECTRIC - CB Serie



NEW



PERFORMANCE CHARACTERISTICS

Climatic Category	55/125/56
Capacitance Range	1nF to 1,5μF
Tolerance on C _R	+/-5% , +/-10%
Nominal Voltages	25Vdc to 250Vdc
Test Voltage	1,4Vr 2s to 25°C
Soldering methods	IR or vapor phase reflow (not suitable for wave soldering)
Tangent of Loss Angle :D.F	< 100 x10 ⁻⁴
Insulation resistance minimum : IR	for C ≤0.33μF IR > 1000 MΩ at 20°C for 1 min.charge at 10VDC for VR< 100VDC and 100VDC for VR>=100V for C> 0,33μF IR.C> 400sec. at 20°C for 1 min.charge at 10VDC for VR< 100VDC and 100VDC for VR>=100V
Temperature range	--55°C to +125°C

CAPACITANCE VALUES AND NOMINAL VOLTAGE vs size

PEN version										
Capacitance Range (CR)	VOLTAGE 25V		VOLTAGE 50V		VOLTAGE 100V		VOLTAGE 250V		VOLTAGE 400 & 630V	
	Ordering code	Size	Ordering code	Size	Ordering code	Size	Ordering code	Size	Ordering code	Size
1000pF	CB017C0102+--	1206	CB017D0102+--	1206	CB017E0102+--	1206	CB037G0102+--	1812	D e v e l o p m e n t r a n g e	
2200	CB017C0222+--	1206	CB017D0222+--	1206	CB017E0222+--	1206	CB037G0222+--	1812		
4700	CB017C0472+--	1206	CB017D0472+--	1206	CB017E0472+--	1206	CB037G0472+--	1812		
6800	CB017C0682+--	1206	CB017D0682+--	1206	CB017E0682+--	1206	CB037G0682+--	1812		
10nF	CB017C0103+--	1206	CB017D0103+--	1206	CB017E0103+--	1206	CB037G0103+--	1812		
15	CB017C0153+--	1206	CB017D0153+--	1206	CB027E0153+--	1210	CB037G0153+--	1812		
22	CB017C0223+--	1206	CB017D0223+--	1206	CB027E0223+--	1210	CB037G0223+--	1812		
33	CB027C0333+--	1210	CB027D0333+--	1210	CB037E0333+--	1812	CB047G0333+--	2220		
47	CB027C0473+--	1210	CB027D0473+--	1210	CB037E0473+--	1812	CB047G0473+--	2220		
68	CB027C0683+--	1210	CB027D0683+--	1210	CB037E0683+--	1812	CB047G0683+--	2220		
100nF	CB027C0104+--	1210	CB027D0104+--	1210	CB037E0104+--	1812	CB047G0104+--	2220		
150			CB037D0154+--	1812	CB047E0154+--	2220	CB057G0154+--	2824		
220			CB037D0224+--	1812	CB047E0224+--	2220	CB057G0224+--	2824		
330			CB047D0334+--	2220	CB047E0334+--	2220				
470			CB047D0474+--	2220	CB057E0474+--	2824				
680			CB047D0684+--	2220	CB057E0684+--	2824				
1μF			CB057D0105+--	2824						
1,5			CB057D0155+--	2824						

Replace the + by the tolerance code : J=5% or K=10%

Replace the -- by the packaging suffix : -- = bulk

BA or BC = tape & reel

MOUNTING AND SOLDERING

* Reflow soldering referring to Jedec Standard with some limitations

* Profile limits : 1206 to 1812 60s at temperature > 217°C
T max= 250°C and 10 s between T max and Tmax-5°C
2220 to 2824 75s at temperature > 217°C
T max= 255°C and 10 s between T max and Tmax-5°C

* JEDEC J-Std 020C

Film Chip Capacitors Lead Free Version



PET-HT DIELECTRIC - CB Serie

NEW



PERFORMANCE CHARACTERISTICS

Climatic Category	55/125/56
Capacitance Range	10nF to 4,7μF
Tolerance on C _R	+/-5% , +/-10%
Nominal Voltages	63Vdc to 630Vdc
Test Voltage	1,4Vr 2s to 25°C
Soldering methods	IR or vapor phase reflow (not suitable for wave soldering)
Tangent of Loss Angle :D.F	< 100 x10 ⁻⁴
Insulation resistance minimum : IR	for C ≤ 0.33μF IR > 1000 MΩ at 20°C for 1 min.charge at 10VDC for VR< 100VDC and 100VDC for VR>=100V for C> 0,33μF IR.C> 400sec. at 20°C for 1 min.charge at 10VDC for VR< 100VDC and 100VDC for VR>=100V
Temperature range	--55°C to +125°C

CAPACITANCE VALUES AND NOMINAL VOLTAGE vs size

PET-HT version										
Capacitance Range (CR)	VOLTAGE 63V		VOLTAGE 100V		VOLTAGE 250V		VOLTAGE 400V		VOLTAGE 630V	
	Ordering code	Size	Ordering code	Size	Ordering code	Size	Ordering code	Size	Ordering code	Size
10nF							CB042I0103+--	2220	CB042K0103+--	2220
15							CB042I0153+--	2220	CB042K0153+--	2220
22							CB042I0223+--	2220	CB052K0223+--	2824
33							CB052I0333+--	2824	CB052K0333+--	2824
47					CB042G0473+--	2220	CB052I0473+--	2824	CB162K0473+--	4030
68					CB042G0683+--	2220	CB162I0683+--	4030	CB162K0683+--	4030
100nF					CB042G0104+--	2220	CB162I0104+--	4030	CB172K0104+--	5040
150					CB052G0154+--	2824	CB172I0154+--	5040	CB182K0154+--	6054
220			CB042E0224+--	2220	CB052G0224+--	2824	CB182I0224+--	6054	CB182K0224+--	6054
270			CB042E0274+--	2220	CB162G0274+--	4030	CB182I0274+--	6054	CB182K0274+--	6054
330	CB042D0334+--	2220	CB042E0334+--	2220	CB162G0334+--	4030	CB182I0334+--	6054		
470	CB042D0474+--	2220	CB052E0474+--	2824	CB162G0474+--	4030				
680	CB042D0684+--	2220	CB052E0684+--	2824	CB172G0684+--	5040				
1μF	CB042D0105+--	2220	CB162E0105+--	4030	CB182G0105+--	6054				
1,5	CB052D0155+--	2824	CB162E0155+--	4030	CB182G0155+--	6054				
2,2	CB162D0225+--	4030	CB172E0225+--	5040						
3,3	CB182D0335+--	6054	CB182E0335+--	6054						
4,7	CB182D0475+--	6054	CB182E0475+--	6054						

Replace the + by the tolerance code : J=5% or K=10%
 Replace the -- by the packaging suffix : -- = bulk
 BA or BC = tape & reel

MOUNTING AND SOLDERING

- * Reflow soldering referring to Jedec Standard with some limitations
- * Profile limits :

2220 to 2824	60s at temperature > 217°C
	T max= 245°C and 10 s between T max and Tmax-5°C
4030 to 6054	75s at temperature > 217°C
	T max= 250°C and 10 s between T max and Tmax-5°C

* JEDEC J-Std 020C