

## Ceramic Capacitors

### CCC-31

(1 Flap FL24/10) 24 Values / 600 Pieces  
One Layer Ceramic capacitors for 100 V-DC

**Type/Brand:** EGPU / BCE Sud <sup>discontinued</sup>  
New: TS15 / Suntan or Hi-K / Cosonic

**Temperature:** -55 to +125°C

**Pitch:** 2,5mm

Capacitances	Ceramic	Tolerance	Capacitances	Ceramic	Tolerance
1,0-6,8pF	P 100 or NP0	± 0,25pF	180-470pF	SL / Y5P	± 10%
10-150pF	P100 or NP0	± 5%	560pF-6,8nF	K2000 / Y5P	± 10%
10nF-22nF	K14000	-20+80%			

#### Values-Quantities Selection:

1,0pF	25x	4,7pF	25x	22pF	25x	56pF	25x	180pF	25x	390pF	25x
1,5pF	25x	6,8pF	25x	27pF	25x	68pF	25x	220pF	25x	470pF	25x
2,2pF	25x	10pF	25x	33pF	25x	100pF	25x	270pF	25x	560pF	25x
3,3pF	25x	15pF	25x	47pF	25x	150pF	25x	330pF	25x	680pF	25x

### CCC-32

(1 Flap FL24/10) 24 Values / 285 Pieces  
Ceramic capacitors for 50 V-DC

**Type/Fab:** KDPU / PHILIPS or alternative

Capacitances	Ceramic	Tolerance	Temperature	Pitch
1,0nF-10nF	X7R	± 10%	-55 bis +125°C	2,5mm
15nF-1,0uF	Z5U	± 20%	-55 bis + 85°C	5,0mm

#### Values-Quantities Selection:

1,0nF	25x	3,3nF	10x	6,8nF	10x	27nF	5x	68nF	15x	0,33uF	5x
1,5nF	10x	3,9nF	5x	10nF	25x	33nF	15x	0,10uF	20x	0,47uF	10x
2,2nF	10x	4,7nF	25x	15nF	10x	47nF	20x	0,15uF	5x	0,68uF	5x
2,7nF	5x	5,6nF	5x	22nF	15x	56nF	10x	0,22uF	10x	1,0uF	10x

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**CCC-37**

**(1 Flap FL16/10) 16 Values / 305 Pieces**  
**Multi-Layer Ceramic Capacitors for 63V/100V-DC**

**Type/Brand:** B37981, B37985, B37987, B37988 / Epcos  
 or MKT / Kingtronic  
 or alternative  
 -55 to +125°C (X7R)  
**Temperature:** +10 to +85°C (Z5U)  
 -30 to + 85°C (Y5V)  
**Ceramic:** X7R (1,0 - 100nF)  
 Z5U or Y5V (100nF - 2.200nF)  
**Tolerance:** ±15% for X7R  
 +22 -56% for Z5U / +22 -82% for Y5V  
**Pitch:** 5mm

**Values-Quantities Selection:**

1,0nF	25x	2,2nF	25x	3,3nF	10x	4,7nF	20x
10nF	25x	15nF	10x	22nF	20x	33nF	10x
47nF	25x	68nF	10x	100nF	25x	100nF	25x
220nF	25x	470nF	15x	1,0uF	25x	2,2uF	10x

**Chip Ceramic Capacitors****SMC-31**

**(1 Flap FL24/10) 24 Values / 2.520 Pieces**  
**Multilayer Ceramic capacitor in chip form**

**Type/Brand:** MLCC / Yageo Europe or alternative  
**Voltage:** 50 / 63V-DC  
**Temperature:** -55 to +125°C  
**Size:** 0805

**Values-Quantities Selection: 105 pcs each**

1,0pF/NP0/±0,25pF	10pF/NP0/±5%	100pF/NP0/±5%	1,0nF/X7R/±10%
1,5pF	15pF	150pF	1,5nF
2,2pF	22pF	220pF/X7R/±10%	2,2nF
3,3pF	33pF	330pF	3,3nF
4,7pF	47pF	470pF	4,7nF
6,8pF/NP0/±0,5pF	68pF	680pF	6,8nF

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**SMC-32**

**(1 Flap FL16/10) 16 Values / 2.400 Pieces**  
**Multilayer Ceramic capacitor in chip form**

**Type/Brand:** MLCC / Yageo Europe or alternative

**Temperature:** -55 to +125°C

**Voltage:** 50 / 63V-DC

**Tolerance:** ±10%

**Ceramic:** X7R

**Size:** 0805 <22nF

1206 >33nF

**Values-Quantities Selection: 150 pcs each**

220pF	1,0nF	4,7nF	22nF
330pF	1,5nF	6,8nF	33nF
470pF	2,2nF	10 nF	47nF
680pF	3,3nF	15 nF	68nF

**SMC-34**

**(1 Flap FL24/10) 24 Values / 2.280 Pieces**  
**Ceramic capacitors in chip form**

**Type/Brand:** B37940..      B37871..      B37949 / Epcos or alternative Kemet

**Voltage:** 63V-DC

**Temperature:** -55 to +125°C

**Ceramic:** COG / NPO

**Tolerance:** ±5%

**Size:** 0805(B37940), 1206(B37871), 1210(B37949)

**Values-Quantities Selection:**

**Size: 805 / 105pcs each**

10pF	15pF	22pF	33pF	47pF	68pF	
100pF	150pF	220pF	330pF	470pF	680pF	1000pF

**Size: 1206 / 105pcs each**

100pF	150pF	220pF	330pF	470pF	680pF	1000pF
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**Size: 1206 / 45pcs each**

1500pF	2200pF
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**Size : 1210 / 45pcs each**

3300pF	4700pF
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**SMC-35**

**(1 Flap FL24/10) 24 Values / 2.310 Pieces**  
**Ceramic capacitors in chip form**

**Type/Brand:** B37941.      B37872.      B37951.      B37954.      B37957 /  
 Epcos or alternative Kemet

**Voltage:** 63V-DC

**Tolerance:** ±10%(X7R),      ±20%(Z5U)

**Temperature** -55 to +125°C      -25 to +85°C  
 : (X7R)      (Z5U)

**Size:** 0805(B37941), 1206(B37872), 1210(B37951), 1812(B37954), 2220(B37957)

**Values-Quantities Selection:**

**Size: 0805(X7R) / 105pcs each**

1,0nF	1,5nF	2,2nF	3,3nF	4,7nF	6,8nF
10nF	15nF				

**Size: 1206(X7R) / 105pcs each**

1,0nF	1,5nF	2,2nF	3,3nF	4,7nF	6,8nF
10nF	15nF	22nF	33nF	47nF	68nF
100nF					

**Size: 1210(Z5U oder alternativ X7R) / 220nF 45pcs each**

**Size: 1812(Z5U) / 470nF 30pcs each**

**Size: 2220(X7R) / 1,0uF 30pcs each**

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**SMC-36**

**(2 Flap FL24/10) 48 values/ 6.030 pieces**  
**Multilayer Ceramic capacitor in chip form**

**Type/Brand:** C0603 / Kemet, Vishay, Yageo or alternative

**Voltage:** 10 - 50V-DC

**Temperature:** -55 to +125°C or -25 to +85°C

**Size:** 0603

**Values-Quantities Selection: 135 pcs each**

0,47 (0,5) - 4,7pF	50V	COG	0,25pF Tolerance	E6 Serie
6,8pF	50V	COG	0,5pF Tolerance	
10 - 680pF	50V	COG	5% Tolerance	E12 Serie
1 - 15 nF	50V	X7R	10% Tolerance	E6 Serie
22nF – 100nF	16V	X7R	10% Tolerance	E6 Serie

**Values-Quantities Selection: 60 pcs each**

10nF	50V	Y5V	+/-20% Tolerance
47nF	50V	Y5V	+/-20% Tolerance
100nF	25V	Y5V	+/-20% Tolerance
220nF	16V	X7R	+/-10% Tolerance
470nF	10V/16V	X5R/Y5V	+/-10% / -20+80% Tolerance
1000nF	25V	Y5V	-20+80% Tolerance

**SMC-37**

**(2 Flaps FL16/10) 32 Values / 4.800Pieces**  
**Chip Ceramic Capacitor**

**Type/Brand:** C0402 / Phycomp, Kemet or Alternative

**Voltage:** 0402 / 50V

**Quantity:** each 150 Pieces / Value

**Values-Quantities Selection:**

0,47 (0,5) pF COG ±0,25pF	1,0pF COG ±0,25pF	1,5pF COG ±0,25pF	2,2pF COG ±0,25pF
3,3pF COG ±0,25pF	4,7pF COG ±0,25pF	6,8pF COG ±0,5pF	10pF COG ±5%
15pF COG ±5%	22pF COG ±5%	33pF COG ±5%	47pF COG ±5%
68pF COG ±5%	100pF COG ±5%	120 pF COG ±5%	150pF COG ±5%
220pF COG ±5%	330pF COG ±5%	470pF X7R ±5%	680pF X7R ±5%
150pF X7R ±10%	220pF X7R ±10%	330pF X7R ±10%	470pF X7R ±10%
680pF X7R ±10%	1000pF X7R ±10%	1500pF X7R ±10%	2200pF X7R ±10%
3300pF X7R ±10%	4700pF X7R ±10%	6800pF X7R ±10%	10.000pF X7R ±10%

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