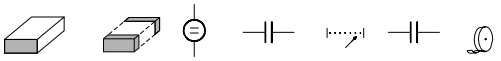
Ordering code system



B37940 K 5 010 C 5 60

Packaging

60 ≙ cardboard tape, 180-mm reel
62 ≙ blister tape, 180-mm reel
70 ≙ cardboard tape, 330-mm reel
72 ≙ blister tape, 330-mm reel
01 ≙ bulk case

Decimal place for cap. values < 10 pF, otherwise 0

Capacitance tolerance

C_R < 10 pF: B ≙ ±0,1 pF
C ≙ ±0,25 pF (standard for capacitance values ≤ 4,7 pF)
D ≙ ±0,5 pF (standard for capacitance values ≤ 8,2 pF)

C_R ≥ 10 pF: F ≙ ± 1 %
G ≙ ± 2 %
J ≙ ± 5 % (standard)
K ≙ ±10 %

Capacitance, coded (example)
010 ≙ 1 · 10^0 pF = 1 pF
100 ≙ 10 · 10^0 pF = 10 pF
221 ≙ 22 · 10^1 pF = 220 pF

Rated voltage

Rated voltage [VDC]	50	100	200
Code	5	1	2

Termination

Standard: K ≙ nickel barrier for case sizes 0402, 0603, 0805, 1206, 1210
On request: J ≙ silver palladium for conductive adhesion: all case sizes

Type and size	
Chip size (**inch** / mm)	Temperature characteristic C0G
0402 / 1005	B37920
0603 / 1608	B37930
0805 / 2012	B37940
1206 / 3216	B37871
1210 / 3225	B37949

SMD

Features

- Good thermal stability
- High insulation resistance
- Low dissipation factor
- Low inductance

Applications

- Resonant circuits
- Filter circuits
- Timing elements
- Coupling and filtering, particularly in RF circuits

Termination

- For soldering: Nickel-barrier terminations (Ni)
- For conductive adhesion: Silver-palladium terminations (AgPd) on request

Options

- Alternative capacitance tolerances available on request

Delivery mode

- Cardboard and blister tape (blister tape for chip thickness ≥ 1,2 ± 0,1 mm and case size 1210), 180-mm and 330-mm reel available
- Bulk case for case size 0402 on request
- Bulk case for case sizes 0603 (50 V) and 0805 (50 V)

Electrical data

Temperature characteristic		C0G	
Climatic category (IEC 60068-1)		55/125/56	
Standard		EIA	
Dielectric		Class 1	
Rated voltage	V_R	50, 100, 200	VDC
Test voltage	V_{test}	2,5 · V_R/5 s	VDC
Capacitance range / E series	C_R	1 pF … 10 nF (E6/E12)	
Temperature coefficient		0 ± 30 · 10^{-6}/K	
Dissipation factor (limit value)	tan δ	< 1,0 · 10^{-3}	
Insulation resistance[1)] at + 25 °C	R_{ins}	> 10^5	MΩ
Insulation resistance[1)] at +125 °C	R_{ins}	> 10^4	MΩ
Time constant[1)] at + 25 °C	τ	> 1000	s
Time constant[1)] at +125 °C	τ	> 100	s
Operating temperature range	T_{op}	−55 … +125	°C
Ageing		none	

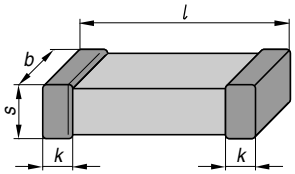
1) For C_R > 10 nF the time constant $\tau = C \cdot R_{ins}$ is given.

Capacitance tolerances

	$C_R \leq 4{,}7$ pF			$5{,}6\ \text{pF} \leq C_R \leq 8{,}2$ pF		
Code letter	B	C (standard)	D	B	C	D (standard)
Tolerance	±0,1 pF (on request)	±0,25 pF	±0,5 pF	±0,1 pF (on request)	±0,25 pF (on request)	±0,5 pF

	$C_R \geq 10$ pF			
Code letter	F	G	J (standard)	K
Tolerance	±1 % (on request for 50 V and 100 V; not available for 200 V)	±2 % (on request for 50 V and 100 V; not available for 200 V)	±5 %	±10 %

Dimensional drawing



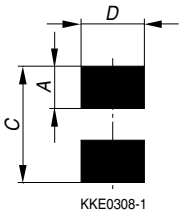
KKE0329-N

Dimensions (mm)

Case size (inch) (mm)	**0402** 1005	**0603** 1608	**0805** 2012	**1206** 3216	**1210** 3225
l	1,0 ± 0,10	1,6 ± 0,15	2,0 ± 0,20	3,2 ± 0,20	3,2 ± 0,30
b	0,5 ± 0,05	0,8 ± 0,10	1,25 ± 0,15	1,6 ± 0,15	2,5 ± 0,30
s	0,5 ± 0,05	0,8 ± 0,10	1,30 max.	1,30 max.	1,70 max.
k	0,1 – 0,4	0,1 – 0,4	0,13 – 0,75	0,25 – 0,75	0,25 – 0,75

Tolerances to CECC 32101-801

Recommended solder pad

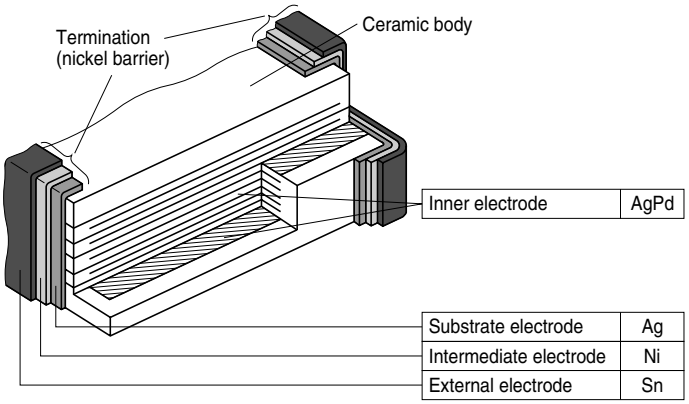


KKE0308-1

Maximum dimensions (mm)

Case size	(inch/mm)	Type	A	C	D
	0402/1005	single chip	0,6	1,7	0,6
	0603/1608	single chip	1,0	3,0	1,0
	0805/2012	single chip	1,2	3,4	1,3
	1206/3216	single chip	1,2	4,5	1,8
	1210/3225	single chip	1,2	4,5	2,8

Termination

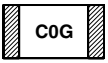


KKE0484-W

Product range chip capacitors

	C0G												
Size[1)] **inch** mm	**0402** 1005		**0603** 1608		**0805** 2012			**1206** 3216			**1210** 3225		
Type	B37920		B37930		B37940			B37871			B37949		
V_R (VDC) / C_R	50		50		50	100	200	50	100		50	100	
1,0 pF			■		■	■		■	■				
1,2 pF			■		■	■		■					
1,5 pF			■		■	■		■	■				
1,8 pF			■		■	■		■					
2,2 pF			■		■	■	■	■	■				
2,7 pF			■		■	■		■					
3,3 pF	■		■		■	■	■	■	■				
3,9 pF	■		■		■	■		■					
4,7 pF	■		■		■	■	■	■	■				
5,6 pF	■		■		■	■		■					
6,8 pF	■		■		■	■	■	■	■				
8,2 pF	■		■		■	■		■					
10 pF	■		■		■	■	■	■	■				
12 pF	■		■		■	■		■					
15 pF	■		■		■	■	■	■	■				
18 pF	■		■		■	■		■					
22 pF	■		■		■	■	■	■	■				
27 pF	■		■		■	■		■					
33 pF	■		■		■	■	■	■	■				
39 pF	■		■		■	■		■					
47 pF	■		■		■	■	■	■	■				
56 pF	■		■		■	■		■					
68 pF	■		■		■	■	■	■	■				
82 pF	■		■		■	■		■					

1) $l \times b$ (inch) / $l \times b$ (mm)



Product range chip capacitors

	C0G												
Size[1)] **inch** mm	**0402** 1005		**0603** 1608		**0805** 2012			**1206** 3216			**1210** 3225		
Type	B37920		B37930		B37940			B37871			B37949		
C_R \ V_R (VDC)	50		50		50	100	200	50	100		50	100	
100 pF	■		■		■	■	■	■	■				
120 pF			■		■	■		■					
150 pF			■		■	■	■	■	■				
180 pF			■		■	■		■					
220 pF			■		■	■	■	■	■				
270 pF			■		■	■		■					
330 pF			■		■	■	■	■	■				
390 pF			■		■	■		■					
470 pF			■		■	■		■	■				
560 pF					■	■		■					
680 pF					■	■		■	■				
820 pF					■	■		■					
1,0 nF					■	■		■	■		■	■	
1,2 nF					■			■					
1,5 nF					■			■	■		■	■	
1,8 nF					■			■					
2,2 nF					■			■	■		■	■	
2,7 nF								■					
3,3 nF								■			■	■	
3,9 nF								■					
4,7 nF								■			■	■	
5,6 nF								■					
6,8 nF											■	■	
8,2 nF													
10 nF											■		

1) $l \times b$ (inch) / $l \times b$ (mm)

Ordering codes and packing for C0G, 50 VDC, nickel-barrier terminations

Case size 0402, 50 VDC

C_R[1]	Ordering code[2]	Chip thickness mm	Cardboard tape, ∅ 180-mm reel ** ≙ 60 pcs/reel	Cardboard tape, ∅ 330-mm reel ** ≙ 70 pcs/reel
3,3 pF	B37920K5030C3**	0,5 ± 0,05	10000	50000
3,9 pF	B37920K5030C9**	0,5 ± 0,05	10000	50000
4,7 pF	B37920K5040C7**	0,5 ± 0,05	10000	50000
5,6 pF	B37920K5050D6**	0,5 ± 0,05	10000	50000
6,8 pF	B37920K5060D8**	0,5 ± 0,05	10000	50000
8,2 pF	B37920K5080D2**	0,5 ± 0,05	10000	50000
10 pF	B37920K5100J0**	0,5 ± 0,05	10000	50000
12 pF	B37920K5120J0**	0,5 ± 0,05	10000	50000
15 pF	B37920K5150J0**	0,5 ± 0,05	10000	50000
18 pF	B37920K5180J0**	0,5 ± 0,05	10000	50000
22 pF	B37920K5220J0**	0,5 ± 0,05	10000	50000
27 pF	B37920K5270J0**	0,5 ± 0,05	10000	50000
33 pF	B37920K5330J0**	0,5 ± 0,05	10000	50000
39 pF	B37920K5390J0**	0,5 ± 0,05	10000	50000
47 pF	B37920K5470J0**	0,5 ± 0,05	10000	50000
56 pF	B37920K5560J0**	0,5 ± 0,05	10000	50000
68 pF	B37920K5680J0**	0,5 ± 0,05	10000	50000
82 pF	B37920K5820J0**	0,5 ± 0,05	10000	50000
100 pF	B37920K5101J0**	0,5 ± 0,05	10000	50000

1) Capacitance values < 3,3 pF and > 100 pF on request.
2) The table contains the ordering codes for the standard capacitance tolerance. For other available capacitance tolerances see page 16.

Ordering codes and packing for C0G, 50 VDC, nickel-barrier terminations

Case size 0603, 50 VDC

C_R	Ordering code[1)]	Chip thickness	Cardboard tape, ∅ 180-mm reel	Cardboard tape, ∅ 330-mm reel	Bulk case
			** ≙ 60	** ≙ 70	** ≙ 01
		mm	pcs/reel	pcs/reel	pcs
1,0 pF	B37930K5010C0**	0,8 ± 0,1	4000	16000	15000
1,2 pF	B37930K5010C2**	0,8 ± 0,1	4000	16000	15000
1,5 pF	B37930K5010C5**	0,8 ± 0,1	4000	16000	15000
1,8 pF	B37930K5010C8**	0,8 ± 0,1	4000	16000	15000
2,2 pF	B37930K5020C2**	0,8 ± 0,1	4000	16000	15000
2,7 pF	B37930K5020C7**	0,8 ± 0,1	4000	16000	15000
3,3 pF	B37930K5030C3**	0,8 ± 0,1	4000	16000	15000
3,9 pF	B37930K5030C9**	0,8 ± 0,1	4000	16000	15000
4,7 pF	B37930K5040C7**	0,8 ± 0,1	4000	16000	15000
5,6 pF	B37930K5050D6**	0,8 ± 0,1	4000	16000	15000
6,8 pF	B37930K5060D8**	0,8 ± 0,1	4000	16000	15000
8,2 pF	B37930K5080D2**	0,8 ± 0,1	4000	16000	15000
10 pF	B37930K5100J0**	0,8 ± 0,1	4000	16000	15000
12 pF	B37930K5120J0**	0,8 ± 0,1	4000	16000	15000
15 pF	B37930K5150J0**	0,8 ± 0,1	4000	16000	15000
18 pF	B37930K5180J0**	0,8 ± 0,1	4000	16000	15000
22 pF	B37930K5220J0**	0,8 ± 0,1	4000	16000	15000
27 pF	B37930K5270J0**	0,8 ± 0,1	4000	16000	15000
33 pF	B37930K5330J0**	0,8 ± 0,1	4000	16000	15000
39 pF	B37930K5390J0**	0,8 ± 0,1	4000	16000	15000
47 pF	B37930K5470J0**	0,8 ± 0,1	4000	16000	15000
56 pF	B37930K5560J0**	0,8 ± 0,1	4000	16000	15000
68 pF	B37930K5680J0**	0,8 ± 0,1	4000	16000	15000
82 pF	B37930K5820J0**	0,8 ± 0,1	4000	16000	15000
100 pF	B37930K5101J0**	0,8 ± 0,1	4000	16000	15000
120 pF	B37930K5121J0**	0,8 ± 0,1	4000	16000	15000
150 pF	B37930K5151J0**	0,8 ± 0,1	4000	16000	15000
180 pF	B37930K5181J0**	0,8 ± 0,1	4000	16000	15000
220 pF	B37930K5221J0**	0,8 ± 0,1	4000	16000	15000
270 pF	B37930K5271J0**	0,8 ± 0,1	4000	16000	15000
330 pF	B37930K5331J0**	0,8 ± 0,1	4000	16000	15000
390 pF	B37930K5391J0**	0,8 ± 0,1	4000	16000	15000
470 pF	B37930K5471J0**	0,8 ± 0,1	4000	16000	15000

1) The table contains the ordering codes for the standard capacitance tolerance.
For other available capacitance tolerances see page 16.

Ordering codes and packing for C0G, 50 VDC, nickel-barrier terminations

Case size 0805, 50 VDC					
		Chip thickness	Cardboard tape, ∅ 180-mm reel	Cardboard tape, ∅ 330-mm reel	Bulk case
			** ≙ 60	** ≙ 70	** ≙ 01
C_R	Ordering code[1)]	mm	pcs/reel	pcs/reel	pcs
1,0 pF	B37940K5010C0**	0,6 ± 0,1	5000	20000	10000
1,2 pF	B37940K5010C2**	0,6 ± 0,1	5000	20000	10000
1,5 pF	B37940K5010C5**	0,6 ± 0,1	5000	20000	10000
1,8 pF	B37940K5010C8**	0,6 ± 0,1	5000	20000	10000
2,2 pF	B37940K5020C2**	0,6 ± 0,1	5000	20000	10000
2,7 pF	B37940K5020C7**	0,6 ± 0,1	5000	20000	10000
3,3 pF	B37940K5030C3**	0,6 ± 0,1	5000	20000	10000
3,9 pF	B37940K5030C9**	0,6 ± 0,1	5000	20000	10000
4,7 pF	B37940K5040C7**	0,6 ± 0,1	5000	20000	10000
5,6 pF	B37940K5050D6**	0,6 ± 0,1	5000	20000	10000
6,8 pF	B37940K5060D8**	0,6 ± 0,1	5000	20000	10000
8,2 pF	B37940K5080D2**	0,6 ± 0,1	5000	20000	10000
10 pF	B37940K5100J0**	0,6 ± 0,1	5000	20000	10000
12 pF	B37940K5120J0**	0,6 ± 0,1	5000	20000	10000
15 pF	B37940K5150J0**	0,6 ± 0,1	5000	20000	10000
18 pF	B37940K5180J0**	0,6 ± 0,1	5000	20000	10000
22 pF	B37940K5220J0**	0,6 ± 0,1	5000	20000	10000
27 pF	B37940K5270J0**	0,6 ± 0,1	5000	20000	10000
33 pF	B37940K5330J0**	0,6 ± 0,1	5000	20000	10000
39 pF	B37940K5390J0**	0,6 ± 0,1	5000	20000	10000
47 pF	B37940K5470J0**	0,6 ± 0,1	5000	20000	10000
56 pF	B37940K5560J0**	0,6 ± 0,1	5000	20000	10000
68 pF	B37940K5680J0**	0,6 ± 0,1	5000	20000	10000
82 pF	B37940K5820J0**	0,6 ± 0,1	5000	20000	10000
100 pF	B37940K5101J0**	0,6 ± 0,1	5000	20000	10000
120 pF	B37940K5121J0**	0,6 ± 0,1	5000	20000	10000
150 pF	B37940K5151J0**	0,6 ± 0,1	5000	20000	10000
180 pF	B37940K5181J0**	0,6 ± 0,1	5000	20000	10000
220 pF	B37940K5221J0**	0,6 ± 0,1	5000	20000	10000
270 pF	B37940K5271J0**	0,6 ± 0,1	5000	20000	10000
330 pF	B37940K5331J0**	0,6 ± 0,1	5000	20000	10000
390 pF	B37940K5391J0**	0,6 ± 0,1	5000	20000	10000
470 pF	B37940K5471J0**	0,6 ± 0,1	5000	20000	10000

1) The table contains the ordering codes for the standard capacitance tolerance.
For other available capacitance tolerances see page 16.

Ordering codes and packing for C0G, 50 VDC, nickel-barrier terminations

Case size 0805, 50 VDC					
		Chip thickness	Cardboard tape, ∅ 180-mm reel	Cardboard tape, ∅ 330-mm reel	Bulk case
			** ≙ 60	** ≙ 70	** ≙ 01
C_R	Ordering code[1)]	mm	pcs/reel	pcs/reel	pcs
560 pF	B37940K5561J0**	0,6 ± 0,1	5000	20000	10000
680 pF	B37940K5681J0**	0,6 ± 0,1	5000	20000	10000
820 pF	B37940K5821J0**	0,6 ± 0,1	5000	20000	10000
1,0 nF	B37940K5102J0**	0,6 ± 0,1	5000	20000	10000
1,2 nF	B37940K5122J0**	0,8 ± 0,1	4000	16000	–
1,5 nF	B37940K5152J0**	0,8 ± 0,1	4000	16000	–
1,8 nF	B37940K5182J0**	1,2 ± 0,1	3000[2)]	12000[3)]	–
2,2 nF	B37940K5222J0**	1,2 ± 0,1	3000[2)]	12000[3)]	–

1) The table contains the ordering codes for the standard capacitance tolerance.
For other available capacitance tolerances see page 16.
2) Blister tape, 180-mm reel, ordering code ** ≙ 62
3) Blister tape, 330-mm reel, ordering code ** ≙ 72

Ordering codes and packing for C0G, 100 VDC, nickel-barrier terminations

Case size 0805, 100 VDC

C_R	Ordering code[1)]	Chip thickness mm	Cardboard tape, ∅ 180-mm reel ** ≙ 60 pcs/reel	Cardboard tape, ∅ 330-mm reel ** ≙ 70 pcs/reel
1,0 pF	B37940K1010C0**	0,6 ± 0,1	5000	20000
1,2 pF	B37940K1010C2**	0,6 ± 0,1	5000	20000
1,5 pF	B37940K1010C5**	0,6 ± 0,1	5000	20000
1,8 pF	B37940K1010C8**	0,6 ± 0,1	5000	20000
2,2 pF	B37940K1020C2**	0,6 ± 0,1	5000	20000
2,7 pF	B37940K1020C7**	0,6 ± 0,1	5000	20000
3,3 pF	B37940K1030C3**	0,6 ± 0,1	5000	20000
3,9 pF	B37940K1030C9**	0,6 ± 0,1	5000	20000
4,7 pF	B37940K1040C7**	0,6 ± 0,1	5000	20000
5,6 pF	B37940K1050D6**	0,6 ± 0,1	5000	20000
6,8 pF	B37940K1060D8**	0,6 ± 0,1	5000	20000
8,2 pF	B37940K1080D2**	0,6 ± 0,1	5000	20000
10 pF	B37940K1100J0**	0,6 ± 0,1	5000	20000
12 pF	B37940K1120J0**	0,6 ± 0,1	5000	20000
15 pF	B37940K1150J0**	0,6 ± 0,1	5000	20000
18 pF	B37940K1180J0**	0,6 ± 0,1	5000	20000
22 pF	B37940K1220J0**	0,6 ± 0,1	5000	20000
27 pF	B37940K1270J0**	0,6 ± 0,1	5000	20000
33 pF	B37940K1330J0**	0,6 ± 0,1	5000	20000
39 pF	B37940K1390J0**	0,6 ± 0,1	5000	20000
47 pF	B37940K1470J0**	0,6 ± 0,1	5000	20000
56 pF	B37940K1560J0**	0,6 ± 0,1	5000	20000
68 pF	B37940K1680J0**	0,6 ± 0,1	5000	20000
82 pF	B37940K1820J0**	0,6 ± 0,1	5000	20000
100 pF	B37940K1101J0**	0,6 ± 0,1	5000	20000
120 pF	B37940K1121J0**	0,6 ± 0,1	5000	20000
150 pF	B37940K1151J0**	0,6 ± 0,1	5000	20000
180 pF	B37940K1181J0**	0,6 ± 0,1	5000	20000
220 pF	B37940K1221J0**	0,6 ± 0,1	5000	20000
270 pF	B37940K1271J0**	0,6 ± 0,1	5000	20000
330 pF	B37940K1331J0**	0,6 ± 0,1	5000	20000
390 pF	B37940K1391J0**	0,6 ± 0,1	5000	20000
470 pF	B37940K1471J0**	0,6 ± 0,1	5000	20000

1) The table contains the ordering codes for the standard capacitance tolerance.
For other available capacitance tolerances see page 16.

Ordering codes and packing for C0G, 100 VDC, nickel-barrier terminations

Case size 0805, 100 VDC

C_R	Ordering code[1]	Chip thickness mm	Cardboard tape, ∅ 180-mm reel ** ≙ 60 pcs/reel	Cardboard tape, ∅ 330-mm reel ** ≙ 70 pcs/reel
560 pF	B37940K1561J0**	0,8 ± 0,1	4000	16000
680 pF	B37940K1681J0**	0,8 ± 0,1	4000	16000
820 pF	B37940K1821J0**	1,2 ± 0,1	3000[2]	12000[3]
1,0 nF	B37940K1102J0**	1,2 ± 0,1	3000[2]	12000[3]

1) The table contains the ordering codes for the standard capacitance tolerance.
For other available capacitance tolerances see page 16.
2) Blister tape, 180-mm reel, ordering code ** ≙ 62
3) Blister tape, 330-mm reel, ordering code ** ≙ 72

Ordering codes and packing for C0G, 200 VDC, nickel-barrier terminations

Case size 0805, 200 VDC

C_R[1]	Ordering code[2]	Chip thickness mm	Cardboard tape, ∅ 180-mm reel ** ≙ 60 pcs/reel	Cardboard tape, ∅ 330-mm reel ** ≙ 70 pcs/reel
2,2 pF	B37940K2020C2**	0,6 ± 0,1	5000	20000
3,3 pF	B37940K2030C3**	0,6 ± 0,1	5000	20000
4,7 pF	B37940K2040C7**	0,6 ± 0,1	5000	20000
6,8 pF	B37940K2060D8**	0,6 ± 0,1	5000	20000
10 pF	B37940K2100J0**	0,6 ± 0,1	5000	20000
15 pF	B37940K2150J0**	0,6 ± 0,1	5000	20000
22 pF	B37940K2220J0**	0,6 ± 0,1	5000	20000
33 pF	B37940K2330J0**	0,6 ± 0,1	5000	20000
47 pF	B37940K2470J0**	0,6 ± 0,1	5000	20000
68 pF	B37940K2680J0**	0,6 ± 0,1	5000	20000
100 pF	B37940K2101J0**	0,6 ± 0,1	5000	20000
150 pF	B37940K2151J0**	0,8 ± 0,1	4000	16000
220 pF	B37940K2221J0**	0,8 ± 0,1	4000	16000
330 pF	B37940K2331J0**	0,8 ± 0,1	4000	16000

1) Other capacitance values on request.
2) The table contains the ordering codes for the standard capacitance tolerance. For other available capacitance tolerances see page 16.

Ordering codes and packing for C0G, 50 VDC, nickel-barrier terminations

Case size 1206, 50 VDC

C_R	Ordering code[1)]	Chip thickness mm	Cardboard tape, ∅ 180-mm reel ** ≙ 60 pcs/reel	Cardboard tape, ∅ 330-mm reel ** ≙ 70 pcs/reel
1,0 pF	B37871K5010C0**	0,8 ± 0,1	4000	16000
1,2 pF	B37871K5010C2**	0,8 ± 0,1	4000	16000
1,5 pF	B37871K5010C5**	0,8 ± 0,1	4000	16000
1,8 pF	B37871K5010C8**	0,8 ± 0,1	4000	16000
2,2 pF	B37871K5020C2**	0,8 ± 0,1	4000	16000
2,7 pF	B37871K5020C7**	0,8 ± 0,1	4000	16000
3,3 pF	B37871K5030C3**	0,8 ± 0,1	4000	16000
3,9 pF	B37871K5030C9**	0,8 ± 0,1	4000	16000
4,7 pF	B37871K5040C7**	0,8 ± 0,1	4000	16000
5,6 pF	B37871K5050D6**	0,8 ± 0,1	4000	16000
6,8 pF	B37871K5060D8**	0,8 ± 0,1	4000	16000
8,2 pF	B37871K5080D2**	0,8 ± 0,1	4000	16000
10 pF	B37871K5100J0**	0,8 ± 0,1	4000	16000
12 pF	B37871K5120J0**	0,8 ± 0,1	4000	16000
15 pF	B37871K5150J0**	0,8 ± 0,1	4000	16000
18 pF	B37871K5180J0**	0,8 ± 0,1	4000	16000
22 pF	B37871K5220J0**	0,8 ± 0,1	4000	16000
27 pF	B37871K5270J0**	0,8 ± 0,1	4000	16000
33 pF	B37871K5330J0**	0,8 ± 0,1	4000	16000
39 pF	B37871K5390J0**	0,8 ± 0,1	4000	16000
47 pF	B37871K5470J0**	0,8 ± 0,1	4000	16000
56 pF	B37871K5560J0**	0,8 ± 0,1	4000	16000
68 pF	B37871K5680J0**	0,8 ± 0,1	4000	16000
82 pF	B37871K5820J0**	0,8 ± 0,1	4000	16000
100 pF	B37871K5101J0**	0,8 ± 0,1	4000	16000
120 pF	B37871K5121J0**	0,8 ± 0,1	4000	16000
150 pF	B37871K5151J0**	0,8 ± 0,1	4000	16000
180 pF	B37871K5181J0**	0,8 ± 0,1	4000	16000
220 pF	B37871K5221J0**	0,8 ± 0,1	4000	16000
270 pF	B37871K5271J0**	0,8 ± 0,1	4000	16000
330 pF	B37871K5331J0**	0,8 ± 0,1	4000	16000
390 pF	B37871K5391J0**	0,8 ± 0,1	4000	16000
470 pF	B37871K5471J0**	0,8 ± 0,1	4000	16000

1) The table contains the ordering codes for the standard capacitance tolerance.
For other available capacitance tolerances see page 16.

Ordering codes and packing for C0G, 50 VDC, nickel-barrier terminations

Case size 1206, 50 VDC

C_R	Ordering code[1]	Chip thickness mm	Cardboard tape, ∅ 180-mm reel ** ≙ 60 pcs/reel	Cardboard tape, ∅ 330-mm reel ** ≙ 70 pcs/reel
560 pF	B37871K5561J0**	0,8 ± 0,1	4000	16000
680 pF	B37871K5681J0**	0,8 ± 0,1	4000	16000
820 pF	B37871K5821J0**	0,8 ± 0,1	4000	16000
1,0 nF	B37871K5102J0**	0,8 ± 0,1	4000	16000
1,2 nF	B37871K5122J0**	0,8 ± 0,1	4000	16000
1,5 nF	B37871K5152J0**	0,8 ± 0,1	4000	16000
1,8 nF	B37871K5182J0**	0,8 ± 0,1	4000	16000
2,2 nF	B37871K5222J0**	0,8 ± 0,1	4000	16000
2,7 nF	B37871K5272J0**	0,8 ± 0,1	4000	16000
3,3 nF	B37871K5332J0**	0,8 ± 0,1	4000	16000
3,9 nF	B37871K5392J0**	0,8 ± 0,1	4000	16000
4,7 nF	B37871K5472J0**	1,2 ± 0,1	3000[2]	12000[3]
5,6 nF	B37871K5562J0**	1,2 ± 0,1	3000[2]	12000[3]

1) The table contains the ordering codes for the standard capacitance tolerance.
For other available capacitance tolerances see page 16.
2) Blister tape, 180-mm reel, ordering code ** ≙ 62
3) Blister tape, 330-mm reel, ordering code ** ≙ 72

Ordering codes and packing for C0G, 100 VDC, nickel-barrier terminations

Case size 1206, 100 VDC

C_R	Ordering code[1]	Chip thickness mm	Cardboard tape, ∅ 180-mm reel ** ≙ 60 pcs/reel	Cardboard tape, ∅ 330-mm reel ** ≙ 70 pcs/reel
1,0 pF	B37871K1010C0**	0,8 ± 0,1	4000	16000
1,5 pF	B37871K1010C5**	0,8 ± 0,1	4000	16000
2,2 pF	B37871K1020C2**	0,8 ± 0,1	4000	16000
3,3 pF	B37871K1030C3**	0,8 ± 0,1	4000	16000
4,7 pF	B37871K1040C7**	0,8 ± 0,1	4000	16000
6,8 pF	B37871K1060D8**	0,8 ± 0,1	4000	16000
10 pF	B37871K1100J0**	0,8 ± 0,1	4000	16000
15 pF	B37871K1150J0**	0,8 ± 0,1	4000	16000
22 pF	B37871K1220J0**	0,8 ± 0,1	4000	16000
33 pF	B37871K1330J0**	0,8 ± 0,1	4000	16000
47 pF	B37871K1470J0**	0,8 ± 0,1	4000	16000
68 pF	B37871K1680J0**	0,8 ± 0,1	4000	16000
100 pF	B37871K1101J0**	0,8 ± 0,1	4000	16000
150 pF	B37871K1151J0**	0,8 ± 0,1	4000	16000
220 pF	B37871K1221J0**	0,8 ± 0,1	4000	16000
330 pF	B37871K1331J0**	0,8 ± 0,1	4000	16000
470 pF	B37871K1471J0**	0,8 ± 0,1	4000	16000
680 pF	B37871K1681J0**	0,8 ± 0,1	4000	16000
1,0 nF	B37871K1102J0**	0,8 ± 0,1	4000	16000
1,5 nF	B37871K1152J0**	0,8 ± 0,1	4000	16000
2,2 nF	B37871K1222J0**	1,2 ± 0,1	3000[2]	12000[3]

1) The table contains the ordering codes for the standard capacitance tolerance.
For other available capacitance tolerances see page 16.
2) Blister tape, 180-mm reel, ordering code ** ≙ 62
3) Blister tape, 330-mm reel, ordering code ** ≙ 72

Ordering codes and packing for C0G, 50 VDC, nickel-barrier terminations

Case size 1210, 50 VDC

C_R	Ordering code[1)]	Chip thickness mm	Blister tape, ∅ 180-mm reel ** ≙ 62 pcs/reel	Blister tape, ∅ 330-mm reel ** ≙ 72 pcs/reel
1,0 nF	B37949K5102J0**	0,8 ± 0,1	4000	16000
1,5 nF	B37949K5152J0**	0,8 ± 0,1	4000	16000
2,2 nF	B37949K5222J0**	0,8 ± 0,1	4000	16000
3,3 nF	B37949K5332J0**	0,8 ± 0,1	4000	16000
4,7 nF	B37949K5472J0**	0,8 ± 0,1	4000	16000
6,8 nF	B37949K5682J0**	0,8 ± 0,1	4000	16000
10 nF	B37949K5103J0**	1,2 ± 0,1	3000	12000

1) The table contains the ordering codes for the standard capacitance tolerance.
For other available capacitance tolerances see page 16.

Ordering codes and packing for C0G, 100 VDC, nickel-barrier terminations

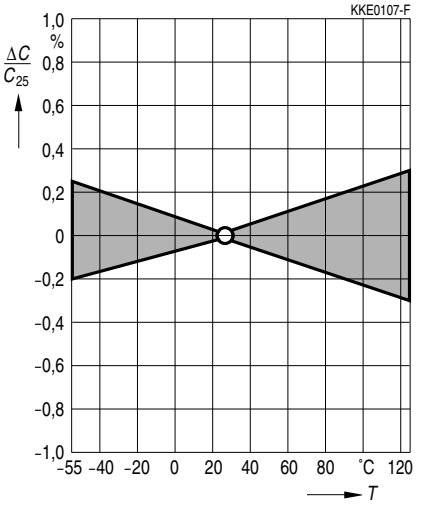
Case size 1210, 100 VDC

C_R	Ordering code[1)]	Chip thickness mm	Blister tape, ∅ 180-mm reel ** ≙ 62 pcs/reel	Blister tape, ∅ 330-mm reel ** ≙ 72 pcs/reel
1,0 nF	B37949K1102J0**	0,8 ± 0,1	4000	16000
1,5 nF	B37949K1152J0**	0,8 ± 0,1	4000	16000
2,2 nF	B37949K1222J0**	0,8 ± 0,1	4000	16000
3,3 nF	B37949K1332J0**	0,8 ± 0,1	4000	16000
4,7 nF	B37949K1472J0**	1,2 ± 0,1	3000	12000
6,8 nF	B37949K1682J0**	1,2 ± 0,1	3000	12000

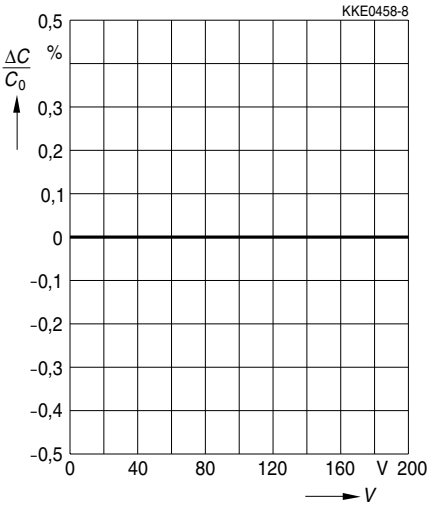
1) The table contains the ordering codes for the standard capacitance tolerance.
For other available capacitance tolerances see page 16.

Typical characteristics

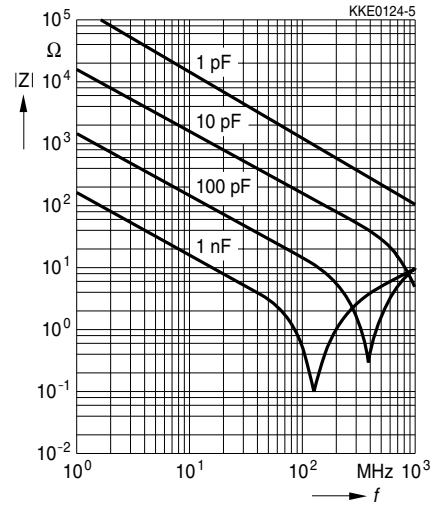
Capacitance change $\Delta C/C_{25}$ versus temperature T (tolerance range ▭)



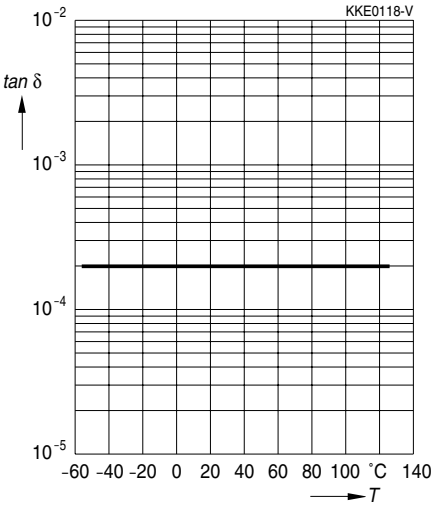
Capacitance change $\Delta C/C_0$ versus superimposed DC voltage V



Impedance $|Z|$ versus frequency f

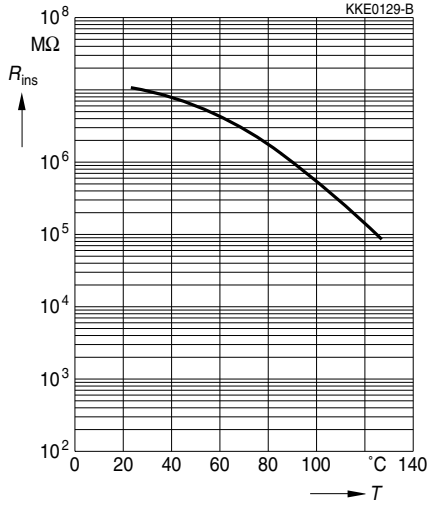


Dissipation factor tan δ versus temperature T

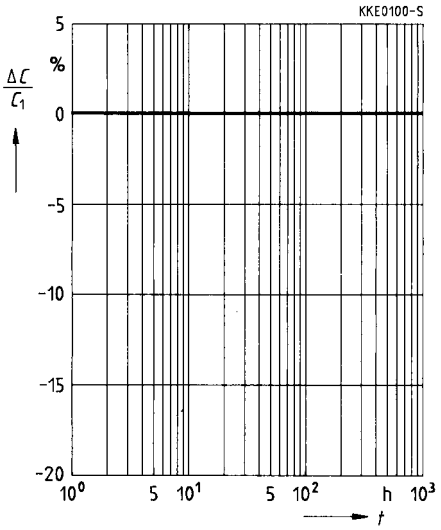


Typical characteristics

Insulation resistance R_{ins} versus temperature T



Capacitance change $\Delta C/C_1$ versus time t



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