EPCOS

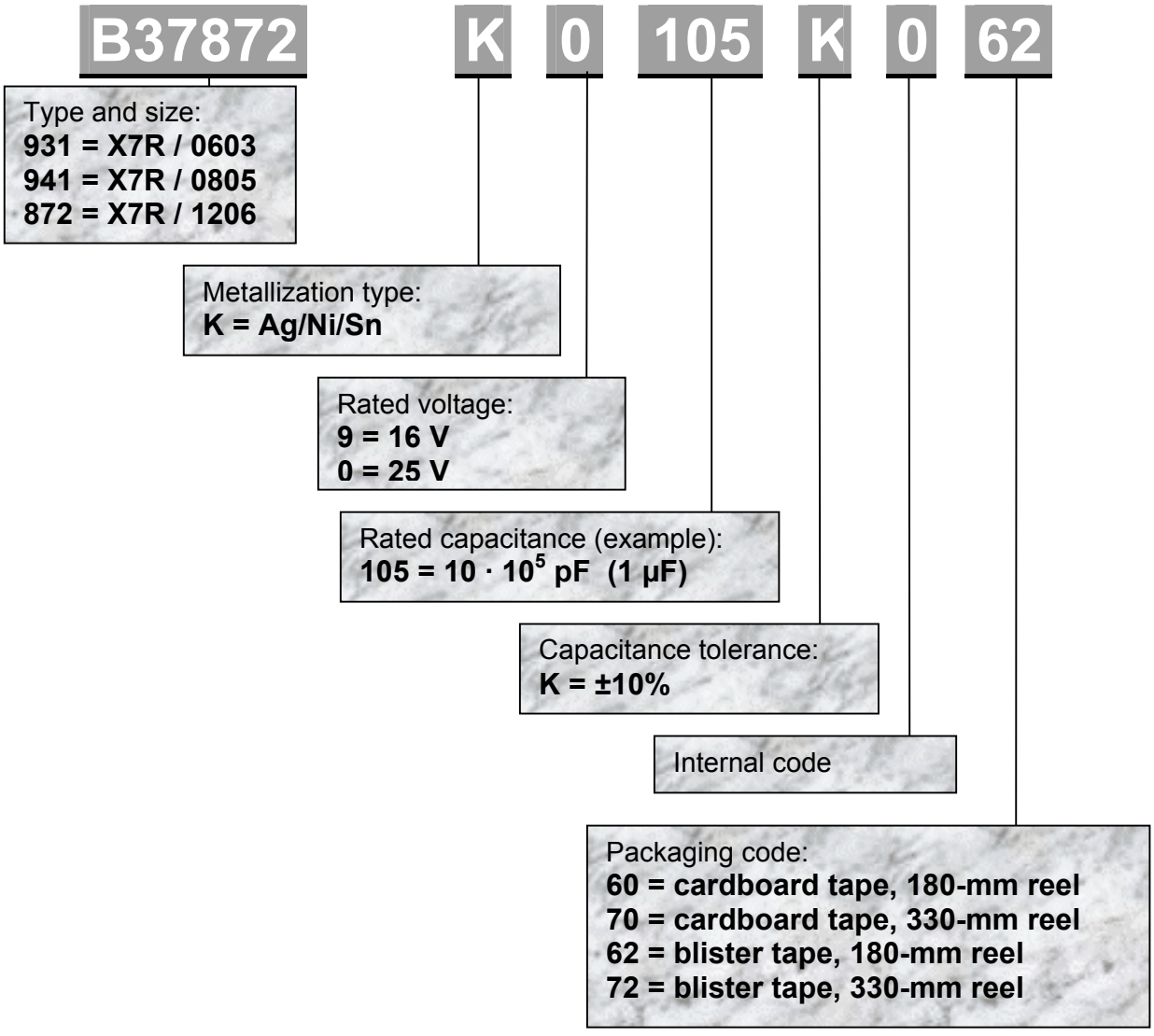
Multilayer ceramic capacitor

HighCV, X7R, 16 V and 25 V

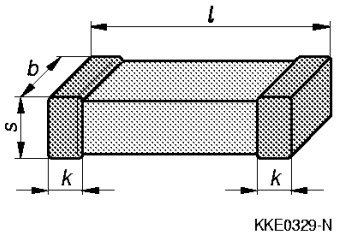
Series/Type: **Chip**
Ordering code: **B37***K**

Date: 15.07.2005
Version: 1

Ordering code



Dimensional drawing



Size **[inch** / mm]	l [mm]	b [mm]	s [mm]	k [mm]
0603 / 1608	1.6 ±0.15	0.80 ±0.1	0.8 ±0,1	0.10 – 0.4
0805 / 2012	2.0 ±0.20	1.25 ±0.15	1.35 max.	0.13 – 0.75
1206 / 3216	3.2 ±0.20	1.60 ±0.15	1.2 ±0.1	0.25 – 0.75

see also “Ordering codes and chip thickness”, dimensions in accordance to CECC 32101-801

Electrical data

Temperature characteristic:	X7R
Climatic category (IEC 60068-1):	55/125/56
Standard:	EIA
Dielectric:	Class 2
Rated voltage:	16 V / 25 V
Capacitance[1)] test conditions	
Test frequency:	(1.0 ±0.2) kHz
Test voltage:	(1.0 ±0.2) V_{RMS}
Max. relative capacitance change:	±15%
Dissipation factor tanδ (limit value):	$< 25 \cdot 10^{-3}$
Time constant τ at +25 °C:	> 500 s
Operating temperature range:	–55 °C ... +125 °C
Capacitance values:	**220 nF … 2.2 µF**

[1)] Subject to aging, please see “General Technical Information” at www.epcos.com/ceramic_capacitors or the data book “Multilayer Ceramic Capacitors”.

Ordering codes and chip thickness

Case size [inch]	C_R [µF]	Ordering code	Thickness [mm]	Packing quantity ∅ 180-mm reel [pcs]	Packing quantity ∅ 330-mm reel [pcs]
16 V types					
0603	0.220	B37931K9224K060*	0.8 ±0.1	4000	16000
0805	0.220	B37941K9224K060*	0.8 ±0.1	4000	16000
	0.330	B37941K9334K060*	0.8 ±0.1	4000	16000
	0.470	B37941K9474K060*	0.8 ±0.1	4000	16000
	1.0	B37941K9105K062**	1.25 ±0.1	3000	12000
1206	1.0	B37872K9105K062**	1.2 ±0.1	3000	12000
	2.2	B37872K9225K062**	1.2 ±0.1	3000	12000

Size [inch]	C_R [µF]	Ordering code	Thickness [mm]	Packing quantity ∅ 180-mm reel [pcs]	Packing quantity ∅ 330-mm reel [pcs]
25 V types					
0603	0.220	B37931K0224K060*	0.8 ±0.1	4000	16000
0805	0.220	B37941K0224K060*	0.8 ±0.1	4000	16000
	0.330	B37941K0334K060*	0.8 ±0.1	4000	16000
	0.470	B37941K0474K060*	0.8 ±0.1	4000	16000
	1.0	B37941K0105K062**	1.25 ±0.1	3000	12000
1206	1.0	B37872K0105K062**	1.2 ±0.1	3000	12000
	2.2	B37872K0225K062**	1.2 ±0.1	3000	12000

* Ordering Code Example — Standard tolerance: ± 10%; Standard packaging: Cardboard tape, 180-mm reel

** Ordering Code Example — Standard tolerance: ± 10%; Standard packaging: Blister tape, 180-mm reel

Further information

Please see General Technical Information at www.epcos.com/ceramic_capacitors or the data book "Multilayer Ceramic Capacitors" for further information on:

- Soldering directions
- Taping and packing
- Surface mounting instructions
- Effects of mechanical stress

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