X2 capacitors with very small dimensions
Rated ac voltage 275 and 300 V, 50/60 Hz

Construction

- Dielectric: polypropylene (MKP)
- Plastic case (UL 94 V-0)
- Impregnated

Features

- Very small dimensions
- Self-healing properties

Terminals

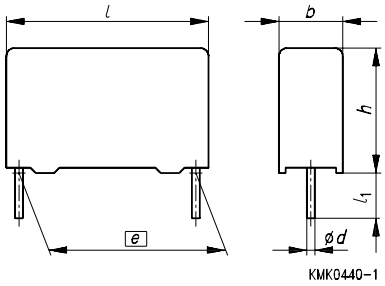
- Parallel wire leads, tinned
- Two standard lead lengths available: 6 mm und 26 mm
  Other lead lengths available upon request.

Marking

Manufacturer's logo and lot number
date code,
rated capacitance (coded),
capacitance tolerance (code letter),
rated ac voltage, type number,
interference suppression sub-class (X2),
style (MKP), climatic category,
awarded marks of conformity

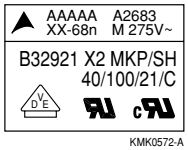
Delivery mode

Bulk (untaped)
Taped (Ammo pack or reel)
For notes on taping,
refer to chapter "Taping and packing", page 274.

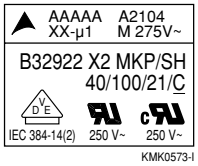


Lead spacing e ±0,4	Lead diameter ∅d (mm)	Lead length l_1 (mm)		Type
10 mm	0,6	6 – 1	—	B 32 921
15 mm	0,8	6 – 1	26 ±2	B 32 922
22,5 mm	0,8	6 – 1	26 ±2	B 32 923
27,5 mm	0,8	6 – 1	26 ±2	B 32 924
37,5 mm	1,0	6 – 1	26 ±2	B 32 926

Lead spacing = 10 mm



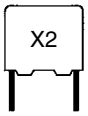
Lead spacing ≥ 15 mm



Marks of conformity

Marks of conformity	Standards	Certificate
	EN 132400 / IEC 384-14, 2nd edition	pending
	UL 1414	
	UL 1283	
	CSA C22.2 No. 0; 1	

EPCOS



B 32 92*

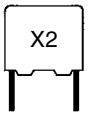
275 Vac

Ordering codes and packing units, rated ac voltage 275 V

Lead spacing e ±0,4 mm	C_R	Maximum dimensions $b \times h \times l$ (mm)	Ordering code[1]	Packing units (pcs)			
				Ammo pack	Reel	Untaped Lead length 6 mm	26 mm
10	47 nF	6,0 × 12,0 × 13,0	B32921-A2473-+***	680	1100	1000	—
	68 nF	6,0 × 12,0 × 13,0	B32921-A2683-M***	680	1100	1000	—
15	68 nF	6,0 × 11,0 × 18,0	B32922-A2683-+***	960	1100	1000	1000
	0,10 µF	6,0 × 11,0 × 18,0	B32922-A2104-M***	960	1100	1000	1000
	0,15 µF	7,0 × 12,5 × 18,0	B32922-A2154-+***	830	900	1000	800
	0,22 µF	8,5 × 14,5 × 18,0	B32922-A2224-+***	680	700	500	500
	0,33 µF	9,0 × 17,5 × 18,0	B32922-A2334-M***	640	700	500	500
22,5	0,33 µF	8,5 × 16,5 × 26,5	B32923-A2334-+***	480	500	510	450
	0,47 µF	8,5 × 16,5 × 26,5	B32923-A2474-M***	480	500	510	450
	0,47 µF	10,5 × 16,5 × 26,5	B32923-B2474-+***	390	400	540	350
	0,68 µF	10,5 × 18,5 × 26,5	B32923-A2684-M***	390	400	540	300
	0,68 µF	10,5 × 20,5 × 26,5	B32923-B2684-+***	390	400	540	300
27,5	1,0 µF	11,0 × 21,0 × 31,5	B32924-A2105-M***	—	350	320	200
	1,5 µF	13,5 × 23,0 × 31,5	B32924-A2155-M***	—	—	260	150
	1,5 µF	14,0 × 24,5 × 31,5	B32924-B2155-+***	—	—	260	100
	2,2 µF	18,0 × 27,5 × 31,5	B32924-A2225-+***	—	—	200	100
37,5	3,3 µF	18,0 × 32,5 × 41,5	B32926-A2335-+***	—	—	90	—
	4,7 µF	20,0 × 39,5 × 41,5	B32926-A2475-M***	—	—	75	—

Capacitance tolerance: ± 20 % ≙ M, ±10 % ≙ K (closer tolerances upon request)

1) Replace the + by the code letter for the required capacitance tolerance.
Replace the *** by the code number for the required lead length or packing.
000 = lead length 6 mm (untaped)
026 = lead length 26 mm (untaped)
289 = taped, Ammo pack
189 = taped, reel

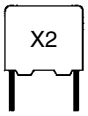


Ordering codes and packing units, rated ac voltage 300 V

Lead spacing $\boxed{e}$ ±0,4 mm	C_R	Maximum dimensions $b \times h \times l$ (mm)	Ordering code[1]	Packing units (pcs)			
				Ammo pack	Reel	Untaped Lead length 6 mm	26 mm
10	10 nF	4,0 × 9,0 × 13,0	B32921-A3103-+***	1000	1700	1000	—
	15 nF	4,0 × 9,0 × 13,0	B32921-A3153-+***	1000	1700	1000	—
	22 nF	5,0 × 11,0 × 13,0	B32921-A3223-+***	830	1300	1000	—
	33 nF	5,0 × 11,0 × 13,0	B32921-A3333-M***	830	1300	1000	—
	33 nF	6,0 × 12,0 × 13,0	B32921-B3333-+***	680	1100	1000	—
	47 nF	6,0 × 12,0 × 13,0	B32921-A3473-+***	680	1100	1000	—
15	22 nF	5,0 × 10,5 × 18,0	B32922-A3223-+***	1170	1300	1000	1000
	33 nF	5,0 × 10,5 × 18,0	B32922-A3333-+***	1170	1300	1000	1000
	47 nF	5,0 × 10,5 × 18,0	B32922-A3473-+***	1170	1300	1000	1000
	68 nF	6,0 × 11,0 × 18,0	B32922-A3683-+***	960	1100	1000	1000
	0,10 µF	6,0 × 12,0 × 18,0	B32922-A3104-M***	960	1100	1000	1000
	0,10 µF	7,0 × 12,5 × 18,0	B32922-B3104-+***	830	900	1000	800
	0,15 µF	8,5 × 14,5 × 18,0	B32922-A3154-+***	680	700	500	500
	0,22 µF	9,0 × 17,5 × 18,0	B32922-A3224-+***	640	700	500	500
22,5	0,15 µF	6,0 × 15,0 × 26,5	B32923-A3154-+***	680	700	720	500
	0,22 µF	7,0 × 16,0 × 26,5	B32923-A3224-+***	580	600	630	500
	0,27 µF	8,5 × 16,5 × 26,5	B32923-A3227+***	480	500	510	450
	0,33 µF	8,5 × 16,5 × 26,5	B32923-A3334-+***	480	500	510	450
	0,39 µF	10,5 × 16,5 × 26,5	B32923-A3394-+***	390	400	540	350
	0,47 µF	10,5 × 16,5 × 26,5	B32923-A3474-M***	390	400	540	350
	0,47 µF	10,5 × 18,5 × 26,5	B32923-B3474-+***	390	400	540	300
	0,56 µF	11,0 × 20,5 × 26,5	B32923-A3564-+***	370	350	510	300
	0,68 µF	11,0 × 20,5 × 26,5	B32923-A3684-+***	370	350	510	300

Capacitance tolerance: ± 20 % ≙ M, ±10 % ≙ K (closer tolerances upon request)

1) Replace the + by the code letter for the required capacitance tolerance.
Replace the *** by the code number for the required lead length or packing.
000 = lead length 6 mm (untaped)
026 = lead length 26 mm (untaped)
289 = taped, Ammo pack
189 = taped, reel



B 32 92*

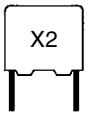
300 Vac

Ordering codes and packing units, rated ac voltage 300 V

Lead spacing e ±0,4 mm	C_R	Maximum dimensions $b \times h \times l$ (mm)	Ordering code[1]	Packing units (pcs)			
				Ammo pack	Reel	Untaped Lead length 6 mm	26 mm
27,5	0,47 µF	11,0 × 21,0 × 31,5	B32924-A3474-+***	—	350	320	200
	0,68 µF	11,0 × 21,0 × 31,5	B32924-A3684-+***	—	350	320	200
	0,82 µF	12,5 × 21,5 × 31,5	B32924-A3824-+***	—	300	280	200
	1,0 µF	12,5 × 21,5 × 31,5	B32924-A3105-M***	—	300	280	200
	1,0 µF	13,5 × 23,0 × 31,5	B32924-B3105-+***	—	250	260	150
	1,5 µF	15,0 × 24,5 × 31,5	B32924-A3155-M***	—	—	240	150
	1,5 µF	18,0 × 27,5 × 31,5	B32924-B3155-+***	—	—	200	100
	2,2 µF	18,0 × 27,5 × 31,5	B32924-A3225-M***	—	—	200	100
	2,2 µF	19,0 × 30,0 × 31,5	B32924-B3225-+***	—	—	180	100
37,5	3,3 µF	18,0 × 32,5 × 41,5	B32926-A3335-+***	—	—	90	—
	4,7 µF	20,0 × 39,5 × 41,5	B32926-A3475-M***	—	—	75	—

Capacitance tolerance: ± 20 % ≙ M, ±10 % ≙ K (closer tolerances upon request)

1) Replace the + by the code letter for the required capacitance tolerance.
Replace the *** by the code number for the required lead length or packing.
000 = lead length 6 mm (untaped)
026 = lead length 26 mm (untaped)
289 = taped, Ammo pack
189 = taped, reel



Technical data

Climatic category in accordance with IEC 60068-1	40/100/21
Lower category temperature T_{min} Upper category temperature T_{max}	– 40 °C + 100 °C
Passive flammability category in accordance with IEC 40 (CO) 752	U_N = 275 V: C U_N = 300 V: B
Damp heat test	21 days/40 °C/93 % relative humidity
Limit values after damp heat test	Capacitance change $\lvert\Delta C/C\rvert$ ≤ 3 % Dissipation factor change $\Delta \tan \delta$ ≤ 0,5 · 10^{-3} (at 1 kHz) ≤ 1,0 · 10^{-3} (at 10 kHz) Insulation resistance R_{is} ≥ 50 % of minimum or time constant $\tau = C_R \cdot R_{is}$ as-delivered values
Permissible continuous ac voltage	275 V (50/60 Hz) 300 V (50/60 Hz)
Permissible continuous dc voltage	560 V
DC test voltage	2000 V, 2 s

Dissipation factor tan δ (in 10^{-3}) at 20 °C (upper limit values)

C_R (µF)	$C_R \leq 0{,}1$	$0{,}1 < C_R \leq 1$	$1 < C_R \leq 2{,}2$	$C_R > 2{,}2$
at 1 kHz	1,0	1,0	1,0	2,0
100 kHz	5	10	15	—

Insulation resistance R_{is} or time constant $\tau = C_R \cdot R_{is}$ at 20 °C, rel. humidity ≤ 65 % (minimum as-delivered values)

$C_R \leq 0{,}33$ µF	$C_R > 0{,}33$ µF
30 GΩ	10 000 s

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