



Film capacitors – EMI suppression capacitors (MKP)

Efficient Filtering – X2 / 305 V AC – B3292xE/F

Series/Type: B32923, B32924, B32926, B32928

Date: February 2008

Version: 1

Recommended applications

- X2 class for interference suppression
- “Across-the-line” applications

Climatic

- Maximum operating temperature of 110 °C
- Climatic category (IEC 60068-1): 40/110/56

Construction

- Dielectric: Polypropylene (MKP)
- Plastic case (UL 94 V-0)
- Epoxy resin sealing (UL 94 V-0)

Features

- Capacitance value up to 45µF
- Very small dimensions
- Good self-healing properties
- High voltage capability

Terminals

- Parallel wire leads, lead-free tinned
- Standard lead lengths: 6-1mm
- Special lead lengths are available on request

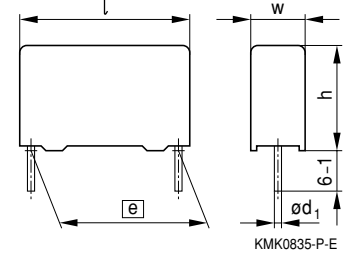
Marking

- Manufacturer’s logo and lot number, date code, rated capacitance (coded), capacitance tolerance (code letter) and rated ac voltage (IEC),
- Series number, sub-class (X2), dielectric code (MKP), climatic category, passive flammability category, approvals.

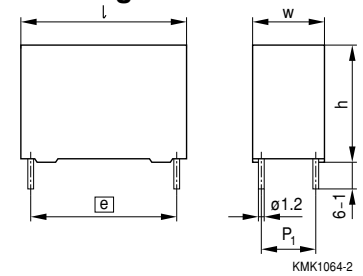
Delivery mode

- Bulk (untaped)
- Reel

Drawing A



Drawing B



Dimensions in mm




Dimensions

Lead spacing e ±0.4 (mm)	Lead diameter d ₁ (mm)	Type	Drawing
22.5	0.8	B32923	A
27.5	0.8	B32924	A
37.5	1.0	B32926	A
52.5	1.2	B32928	B

Marking example



Approvals

Standards	Certificate	Marks of Conformity
IEC 60384-14	40021331	
UL1283	E301966	
CSA C22.2 No.8	E301966	

¹⁾ approved by UL

Technical data

Maximum continuous AC voltage	310 V (50/60 Hz)
Rated AC voltage (IEC 60384-14)	305 V (50/60 Hz)
Maximum operating temperature $T_{op,max}$	+110 °C
DC test voltage	2121 V, 2 s
Dissipation factor $\tan \delta$ (in 10^{-3}) at 20 °C, (upper limit values)	At 1 kHz: 2
Insulation resistance R_{ins} or time constant $\tau = C_R \cdot R_{ins}$ at 100 V DC, 20 °C, rel. humidity $\leq 65\%$ and for 60 s (minimum "as delivered" values)	30 000 s
Passive flammability category to IEC 40 (CO) 752	B
Capacitance Tolerances (measured at 1 kHz)	$\pm 10\%$ (K), $\pm 20\%$ (M)

dV/dt and K_0 values

ϵ	22.5	27.5	37.5	52.5
dV/dt (V/ μ s)	140	100	70	40
K_0 (V ² / μ s)	120414	86010	60207	34404



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Ordering codes and packing units

± 0.4	C_R	Max. dimensions w × h × l	Ordering code	Ammo pack	Reel	Untaped
mm	μF	mm		pcs/unit	pcs/unit	pcs/unit
22.5	2.2	12.0 × 22.0 × 26.5	B32923E3225M***	–	–	450
	3.3	14.5 × 29.5 × 26.5	B32923E3335+***	–	–	260
27.5	2.2	11.0 × 21.0 × 31.5	B32924E3225M***	–	350	588
	2.2	12.5 × 21.5 × 31.5	B32924F3225K***	–	300	525
	3.3	14.0 × 24.5 × 31.5	B32924E3335M***	–	250	462
	3.3	15.0 × 24.0 × 31.5	B32924F3335K***	–	–	420
	4.7	18.0 × 27.5 × 31.5	B32924E3475M***	–	–	357
	4.7	16.0 × 32.0 × 31.5	B32924F3475K***	–	–	266
	5.6	18.0 × 33.0 × 31.5	B32924F3565+***	–	–	238
	6.8	21.0 × 31.0 × 31.5	B32924E3685M***	–	–	196
	6.8	22.0 × 36.5 × 31.5	B32924F3685K***	–	–	196
37.5	8.2	22.0 × 36.5 × 31.5	B32924E3825M***	–	–	196
	2.2	12.0 × 22.0 × 42.0	B32926E3225+***	–	–	405
	3.3	12.0 × 22.0 × 42.0	B32926E3335M***	–	–	405
	4.7	14.0 × 25.0 × 42.0	B32926E3475M***	–	–	345
	6.8	18.0 × 32.5 × 42.0	B32926E3685+***	–	–	180
	10	20.0 × 39.5 × 42.0	B32926E3106+***	–	–	160
	15	28.0 × 37.0 × 42.0	B32926E3156+***	–	–	55
	20	28.0 × 42.5 × 42.0	B32926E3206M***	–	–	110
52.5	20	30.0 × 45.0 × 42.0	B32926F3206K***	–	–	50
	25	30.0 × 45.0 × 57.5	B32928E3256+***	–	–	70
	30	30.0 × 45.0 × 57.5	B32928E3306+***	–	–	70
	40	35.0 × 50.0 × 57.5	B32928E3406+***	–	–	27
	45	35.0 × 50.0 × 57.5	B32928E3456M***	–	–	27

Bold types are preferred types. Further E series and intermediate capacitance values are available on request.

Composition of ordering code

+ = Capacitance tolerance code

M = $\pm 20\%$

K = $\pm 10\%$

*** = Packing code

000 = Untaped (lead length 6–1mm)

189 = Reel pack

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