



Film Capacitors

Metallized Polyester Film Capacitors (MKT)

Series/Type: B32520 ... B32529

Date: August 2004

© EPCOS AG 2004. Reproduction, publication and dissemination of this data sheet, enclosures hereto and the information contained therein without EPCOS' prior express consent is prohibited.

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

Typical applications

- Blocking
- Coupling, decoupling
- Bypassing
- RFI for automotive

Climatic

- Max. operating temperature: 125 °C
- Climatic category (IEC 60068-1): 55/125/56

Construction

- Dielectric: polyethylene terephthalate (polyester, PET)
- Stacked-film technology for lead spacing 5 to 15 mm
= code D or C in digit 7 of ordering code
- Wound capacitor technology for lead spacing 10 to 27.5 mm
= code N, Q or T in digit 7 of ordering code
- Plastic case (UL 94 V-0)
- Epoxy resin sealing (UL 94 V-0)

Features

- High pulse strength
- High contact reliability

Terminals

- Parallel wire leads, lead-free tinned
- Special lead lengths available on request

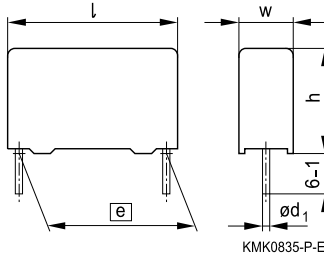
Marking

Manufacturer's logo,
rated capacitance (coded), cap. tolerance (code letter),
rated DC voltage, date of manufacture (coded),
coded type ("1") for lead spacing 5 mm,
series and lot number for lead spacing ≥ 10 mm

Delivery mode

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

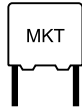
Dimensional drawing



Dimensions in mm

Lead spacing $e \pm 0.4$	Lead diameter d_1	Type
5.0	0.5	B32529
7.5	0.5	B32520
10.0	0.6 ¹⁾	B32521
15.0	0.8	B32522
22.5	0.8	B32523
27.5	0.8	B32524

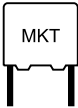
1) 0.5 mm for capacitor width $w = 4$ mm



Overview of available types

Lead spacing	5.0 mm						7.5 mm				10.0 mm				
Type	B32529						B32520				B32521				
Page	5						9				11				
Technology	s	s	s	s	s	s	s	s	s	s	s	s	s	s	w
V_R (VDC)	50	63	100	250	400	630	63	100	250	400	63	100	250	400	630
V_{rms} (VAC)	32	40	63	160	200	400	40	63	160	200	40	63	160	200	200
C_R (μF)															
0.0010															
0.0015															
0.0022															
0.0033															
0.0047															
0.0068															
0.010															
0.015															
0.022															
0.033															
0.047															
0.068															
0.10															
0.15															
0.22															
0.33															
0.47															
0.68															
1.0															
1.5															
2.2															
3.3															

Technology: s = Stacked-film technology / w = Wound capacitor technology



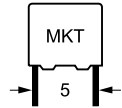
B32520 ... B32529

General purpose (stacked/wound)

Overview of available types

Lead spacing	15.0 mm						22.5 mm						27.5 mm				
Type	B32522						B32523						B32524				
Page	13						15						16				
Technology	s	s/w	s/w	s	w	w	w	w	w	w	w	w	w	w	w	w	w
V_R (VDC)	63	100	250	400	450	630	63	100	250	400	630	63	100	250	400	630	
V_{rms} (VAC)	40	63	160	200	200	200	40	63	160	200	200	40	63	160	200	220	
C_R (μF)																	
0.033																	
0.047																	
0.068																	
0.10																	
0.15																	
0.22																	
0.33																	
0.47																	
0.68																	
1.0																	
1.5																	
2.2																	
3.3																	
4.7																	
6.8																	
10																	
15																	
22																	
33																	
47																	
68																	

Technology: s = Stacked-film technology / w = Wound capacitor technology



Ordering codes and packing units (lead spacing 5 mm)

V_R	V_{rms} $f \leq 60 \text{ Hz}$ VDC	C_R μF	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
50	32	0.33	$3.0 \times 6.5 \times 7.2$	B32529C5334+***	2700	2400	2000
		0.47	$3.5 \times 8.0 \times 7.2$	B32529C5474+***	2300	2000	2000
		0.68	$4.5 \times 9.5 \times 7.3$	B32529C5684+***	1800	1500	1500
		1.0	$4.5 \times 9.5 \times 7.3$	B32529C5105+***	1800	1500	1500
		1.5	$6.0 \times 10.5 \times 7.5$	B32529C5155+***	1300	1100	1000
		2.2	$7.8 \times 13.0 \times 7.8$	B32529D5225+***	1000	800	1000
		3.3	$7.8 \times 13.0 \times 7.8$	B32529D5335+***	1000	800	1000
63	40	0.0010	$2.5 \times 6.5 \times 7.2$	B32529C0102+***	3200	2800	2000
		0.0015	$2.5 \times 6.5 \times 7.2$	B32529C0152+***	3200	2800	2000
		0.0022	$2.5 \times 6.5 \times 7.2$	B32529C0222+***	3200	2800	2000
		0.0033	$2.5 \times 6.5 \times 7.2$	B32529C0332+***	3200	2800	2000
		0.0047	$2.5 \times 6.5 \times 7.2$	B32529C0472+***	3200	2800	2000
		0.0068	$2.5 \times 6.5 \times 7.2$	B32529C0682+***	3200	2800	2000
		0.010	$2.5 \times 6.5 \times 7.2$	B32529C0103+***	3200	2800	2000
		0.015	$2.5 \times 6.5 \times 7.2$	B32529C0153+***	3200	2800	2000
		0.022	$2.5 \times 6.5 \times 7.2$	B32529C0223+***	3200	2800	2000
		0.033	$2.5 \times 6.5 \times 7.2$	B32529C0333+***	3200	2800	2000
		0.047	$2.5 \times 6.5 \times 7.2$	B32529C0473+***	3200	2800	2000
		0.068	$2.5 \times 6.5 \times 7.2$	B32529C0683+***	3200	2800	2000
		0.10	$2.5 \times 6.5 \times 7.2$	B32529C0104+***	3200	2800	2000
		0.15	$2.5 \times 6.5 \times 7.2$	B32529C0154+***	3200	2800	2000
		0.22	$2.5 \times 6.5 \times 7.2$	B32529C0224+***	3200	2800	2000
		0.33	$3.0 \times 6.5 \times 7.2$	B32529C0334+***	2700	2400	2000
		0.47	$3.5 \times 8.0 \times 7.2$	B32529C0474+***	2300	2000	2000
		0.68	$4.5 \times 9.5 \times 7.3$	B32529C0684+***	1800	1500	1500
		1.0	$4.5 \times 9.5 \times 7.3$	B32529C0105+***	1800	1500	1500
		1.5	$6.0 \times 10.5 \times 7.5$	B32529C0155+***	1300	1100	1000
		2.2	$7.8 \times 13.0 \times 7.8$	B32529D0225+***	1000	800	1000

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

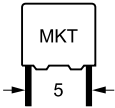
J = $\pm 5\%$

*** = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (lead length 6 – 1 mm)


B32529
General purpose (stacked)
Ordering codes and packing units (lead spacing 5 mm)

V_R	V_{rms} $f \leq 60 \text{ Hz}$	C_R	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
VDC	VAC	μF					
100	63	0.0010	$2.5 \times 6.5 \times 7.2$	B32529C1102+***	3200	2800	2000
		0.0015	$2.5 \times 6.5 \times 7.2$	B32529C1152+***	3200	2800	2000
		0.0022	$2.5 \times 6.5 \times 7.2$	B32529C1222+***	3200	2800	2000
		0.0033	$2.5 \times 6.5 \times 7.2$	B32529C1332+***	3200	2800	2000
		0.0047	$2.5 \times 6.5 \times 7.2$	B32529C1472+***	3200	2800	2000
		0.0068	$2.5 \times 6.5 \times 7.2$	B32529C1682+***	3200	2800	2000
		0.010	$2.5 \times 6.5 \times 7.2$	B32529C1103+***	3200	2800	2000
		0.015	$2.5 \times 6.5 \times 7.2$	B32529C1153+***	3200	2800	2000
		0.022	$2.5 \times 6.5 \times 7.2$	B32529C1223+***	3200	2800	2000
		0.033	$2.5 \times 6.5 \times 7.2$	B32529C1333+***	3200	2800	2000
		0.047	$2.5 \times 6.5 \times 7.2$	B32529C1473+***	3200	2800	2000
		0.068	$2.5 \times 6.5 \times 7.2$	B32529C1683+***	3200	2800	2000
		0.10	$2.5 \times 6.5 \times 7.2$	B32529C1104+***	3200	2800	2000
		0.15	$3.0 \times 6.5 \times 7.2$	B32529C1154+***	2700	2400	2000
		0.22	$3.5 \times 8.0 \times 7.2$	B32529C1224+***	2300	2000	2000
		0.33	$3.5 \times 8.0 \times 7.2$	B32529C1334+***	2300	2000	2000
		0.47	$4.5 \times 9.5 \times 7.3$	B32529C1474+***	1800	1500	1500
		0.68	$6.0 \times 10.5 \times 7.5$	B32529C1684+***	1300	1100	1000
		1.0	$7.8 \times 13.0 \times 7.8$	B32529D1105+***	1000	800	1000

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

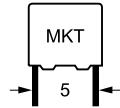
J = $\pm 5\%$

*** = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (lead length 6 – 1 mm)



Ordering codes and packing units (lead spacing 5 mm)

V_R	V_{rms} $f \leq 60 \text{ Hz}$	C_R	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
VDC	VAC	μF					
250	160	0.0010	$2.5 \times 6.5 \times 7.2$	B32529C3102+***	3200	2800	2000
		0.0015	$2.5 \times 6.5 \times 7.2$	B32529C3152+***	3200	2800	2000
		0.0022	$2.5 \times 6.5 \times 7.2$	B32529C3222+***	3200	2800	2000
		0.0033	$2.5 \times 6.5 \times 7.2$	B32529C3332+***	3200	2800	2000
		0.0047	$2.5 \times 6.5 \times 7.2$	B32529C3472+***	3200	2800	2000
		0.0068	$2.5 \times 6.5 \times 7.2$	B32529C3682+***	3200	2800	2000
		0.010	$2.5 \times 6.5 \times 7.2$	B32529C3103+***	3200	2800	2000
		0.015	$2.5 \times 6.5 \times 7.2$	B32529C3153+***	3200	2800	2000
		0.022	$2.5 \times 6.5 \times 7.2$	B32529C3223+***	3200	2800	2000
		0.033	$3.0 \times 6.5 \times 7.2$	B32529C3333+***	2700	2400	2000
		0.047	$3.5 \times 8.0 \times 7.2$	B32529C3473+***	2300	2000	2000
		0.068	$4.5 \times 9.5 \times 7.3$	B32529C3683+***	1800	1500	1500
		0.10	$4.5 \times 9.5 \times 7.3$	B32529C3104+***	1800	1500	1500
		0.15	$5.0 \times 10.0 \times 7.5$	B32529C3154+***	1600	1400	1500
		0.22	$7.8 \times 13.0 \times 7.8$	B32529D3224+***	1000	800	1000
		0.33	$7.8 \times 13.0 \times 7.8$	B32529C3334+***	1000	800	1000
		0.47	$7.8 \times 13.0 \times 7.8$	B32529C3474+***	1000	800	1000
400	200	0.0010	$2.5 \times 6.5 \times 7.2$	B32529C6102+***	3200	2800	2000
		0.0015	$2.5 \times 6.5 \times 7.2$	B32529C6152+***	3200	2800	2000
		0.0022	$2.5 \times 6.5 \times 7.2$	B32529C6222+***	3200	2800	2000
		0.0033	$2.5 \times 6.5 \times 7.2$	B32529C6332+***	3200	2800	2000
		0.0047	$2.5 \times 6.5 \times 7.2$	B32529C6472+***	3200	2800	2000
		0.0068	$2.5 \times 6.5 \times 7.2$	B32529C6682+***	3200	2800	2000
		0.010	$3.0 \times 6.5 \times 7.2$	B32529C6103+***	2700	2400	2000
		0.015	$3.5 \times 8.0 \times 7.2$	B32529C6153+***	2300	2000	2000
		0.022	$4.5 \times 9.5 \times 7.3$	B32529C6223+***	1800	1500	1500
		0.033	$5.0 \times 10.0 \times 7.5$	B32529C6333+***	1600	1400	1500
		0.047	$6.0 \times 10.5 \times 7.5$	B32529C6473+***	1300	1100	1000
		0.068	$7.8 \times 13.0 \times 7.8$	B32529D6683+***	1000	800	1000
		0.10	$7.8 \times 13.0 \times 7.8$	B32529D6104+***	1000	800	1000

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

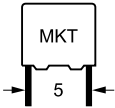
J = $\pm 5\%$

*** = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (lead length 6 – 1 mm)


B32529
General purpose (stacked)
Ordering codes and packing units (lead spacing 5 mm)

V_R	V_{rms} $f \leq 60 \text{ Hz}$	C_R	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
VDC	VAC	μF					
630	400	0.0010	$2.5 \times 6.5 \times 7.2$	B32529C8102+***	3200	2800	2000
		0.0015	$2.5 \times 6.5 \times 7.2$	B32529C8152+***	3200	2800	2000
		0.0022	$2.5 \times 6.5 \times 7.2$	B32529C8222+***	3200	2800	2000
		0.0033	$3.5 \times 8.0 \times 7.2$	B32529C8332+***	2300	2000	2000
		0.0047	$3.5 \times 8.0 \times 7.2$	B32529C8472+***	2300	2000	2000
		0.0068	$3.5 \times 8.0 \times 7.2$	B32529C8682+***	2300	2000	2000
		0.010	$5.0 \times 10.0 \times 7.5$	B32529C8103+***	1600	1400	1500

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

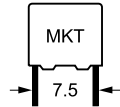
J = $\pm 5\%$

*** = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (lead length 6 – 1 mm)



Ordering codes and packing units (lead spacing 7.5 mm)

V_R	V_{rms} $f \leq 60 \text{ Hz}$ VDC	C_R μF	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
63	40	0.068	$2.5 \times 7.0 \times 10.0$	B32520C0683+***	3200	2800	2500
		0.10	$2.5 \times 7.0 \times 10.0$	B32520C0104+***	3200	2800	2500
		0.15	$2.5 \times 7.0 \times 10.0$	B32520C0154+***	3200	2800	2500
		0.22	$2.5 \times 7.0 \times 10.0$	B32520C0224+***	3200	2800	2500
		0.33	$2.5 \times 7.0 \times 10.0$	B32520C0334+***	3200	2800	2500
		0.47	$3.0 \times 8.0 \times 10.0$	B32520C0474+***	2600	2400	2000
		0.68	$4.0 \times 8.5 \times 10.0$	B32520C0684+***	2000	1800	1500
		1.0	$5.0 \times 10.5 \times 10.0$	B32520C0105+***	1600	1400	1000
		1.5	$5.0 \times 10.5 \times 10.0$	B32520C0155+***	1600	1400	1000
		2.2	$6.0 \times 12.0 \times 10.3$	B32520C0225+***	1300	1100	750
100	63	0.047	$2.5 \times 7.0 \times 10.0$	B32520C1473+***	3200	2800	2500
		0.068	$2.5 \times 7.0 \times 10.0$	B32520C1683+***	3200	2800	2500
		0.10	$2.5 \times 7.0 \times 10.0$	B32520C1104+***	3200	2800	2500
		0.15	$3.0 \times 8.0 \times 10.0$	B32520C1154+***	2600	2400	2000
		0.22	$3.0 \times 8.0 \times 10.0$	B32520C1224+***	2600	2400	2000
		0.33	$4.0 \times 8.5 \times 10.0$	B32520C1334+***	2000	1800	1500
		0.47	$5.0 \times 10.5 \times 10.0$	B32520C1474+***	1600	1400	1000
		0.68	$6.0 \times 12.0 \times 10.3$	B32520C1684+***	1300	1100	750
		1.0	$6.0 \times 12.0 \times 10.3$	B32520C1105+***	1300	1100	750
250	160	0.015	$2.5 \times 7.0 \times 10.0$	B32520C3153+***	3200	2800	2500
		0.022	$2.5 \times 7.0 \times 10.0$	B32520C3223+***	3200	2800	2500
		0.033	$2.5 \times 7.0 \times 10.0$	B32520C3333+***	3200	2800	2500
		0.047	$2.5 \times 7.0 \times 10.0$	B32520C3473+***	3200	2800	2500
		0.068	$3.0 \times 8.0 \times 10.0$	B32520C3683+***	2600	2400	2000
		0.10	$4.0 \times 8.5 \times 10.0$	B32520C3104+***	2000	1800	1500
		0.15	$5.0 \times 10.5 \times 10.0$	B32520C3154+***	1600	1400	1000
		0.22	$6.0 \times 12.0 \times 10.3$	B32520C3224+***	1300	1100	750

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

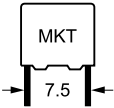
J = $\pm 5\%$

*** = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (lead length 6 – 1 mm)


B32520
General purpose (stacked)
Ordering codes and packing units (lead spacing 7.5 mm)

V_R	V_{rms} $f \leq 60 \text{ Hz}$	C_R	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
VDC	VAC	μF					
400	200	0.0010	$2.5 \times 7.0 \times 10.0$	B32520C6102+***	3200	2800	2500
		0.0015	$2.5 \times 7.0 \times 10.0$	B32520C6152+***	3200	2800	2500
		0.0022	$2.5 \times 7.0 \times 10.0$	B32520C6222+***	3200	2800	2500
		0.0033	$2.5 \times 7.0 \times 10.0$	B32520C6332+***	3200	2800	2500
		0.0047	$2.5 \times 7.0 \times 10.0$	B32520C6472+***	3200	2800	2500
		0.0068	$2.5 \times 7.0 \times 10.0$	B32520C6682+***	3200	2800	2500
		0.010	$2.5 \times 7.0 \times 10.0$	B32520C6103+***	3200	2800	2500
		0.015	$3.0 \times 8.0 \times 10.0$	B32520C6153+***	2600	2400	2000
		0.022	$4.0 \times 8.5 \times 10.0$	B32520C6223+***	2000	1800	1500
		0.033	$5.0 \times 10.5 \times 10.0$	B32520C6333+***	1600	1400	1000
		0.047	$5.0 \times 10.5 \times 10.0$	B32520C6473+***	1600	1400	1000
		0.068	$6.0 \times 12.0 \times 10.3$	B32520C6683+***	1300	1100	750

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

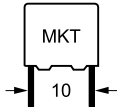
J = $\pm 5\%$

*** = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (lead length 6 – 1 mm)


Ordering codes and packing units (lead spacing 10 mm)

V_R	V_{rms} $f \leq 60 \text{ Hz}$	C_R	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
VDC	VAC	μF					
63	40	0.47	$4.0 \times 7.0 \times 13.0$	B32521C0474+***	1000	1700	1000
		0.68	$4.0 \times 7.0 \times 13.0$	B32521C0684+***	1000	1700	1000
		1.0	$4.0 \times 9.0 \times 13.0$	B32521C0105+***	1000	1700	1000
		1.5	$5.0 \times 11.0 \times 13.0$	B32521C0155+***	830	1300	1000
		2.2	$5.0 \times 11.0 \times 13.0$	B32521C0225+***	830	1300	1000
		3.3	$6.0 \times 12.0 \times 13.0$	B32521C0335+***	680	1100	1000
100	63	0.10	$4.0 \times 7.0 \times 13.0$	B32521C1104+***	1000	1700	1000
		0.15	$4.0 \times 7.0 \times 13.0$	B32521C1154+***	1000	1700	1000
		0.22	$4.0 \times 7.0 \times 13.0$	B32521C1224+***	1000	1700	1000
		0.33	$4.0 \times 7.0 \times 13.0$	B32521C1334+***	1000	1700	1000
		0.47	$4.0 \times 9.0 \times 13.0$	B32521C1474+***	1000	1700	1000
		0.68	$5.0 \times 11.0 \times 13.0$	B32521C1684+***	830	1300	1000
		1.0	$6.0 \times 12.0 \times 13.0$	B32521C1105+***	680	1100	1000
250	160	0.033	$4.0 \times 7.0 \times 13.0$	B32521C3333+***	1000	1700	1000
		0.047	$4.0 \times 7.0 \times 13.0$	B32521C3473+***	1000	1700	1000
		0.068	$4.0 \times 7.0 \times 13.0$	B32521C3683+***	1000	1700	1000
		0.10	$4.0 \times 7.0 \times 13.0$	B32521C3104+***	1000	1700	1000
		0.15	$4.0 \times 9.0 \times 13.0$	B32521C3154+***	1000	1700	1000
		0.22	$5.0 \times 11.0 \times 13.0$	B32521C3224+***	830	1300	1000
		0.33	$5.0 \times 11.0 \times 13.0$	B32521C3334+***	830	1300	1000
		0.47	$6.0 \times 12.0 \times 13.0$	B32521C3474+***	680	1100	1000
400	200	0.010	$4.0 \times 7.0 \times 13.0$	B32521C6103+***	1000	1700	1000
		0.015	$4.0 \times 7.0 \times 13.0$	B32521C6153+***	1000	1700	1000
		0.022	$4.0 \times 7.0 \times 13.0$	B32521C6223+***	1000	1700	1000
		0.033	$4.0 \times 9.0 \times 13.0$	B32521C6333+***	1000	1700	1000
		0.047	$5.0 \times 11.0 \times 13.0$	B32521C6473+***	830	1300	1000
		0.068	$5.0 \times 11.0 \times 13.0$	B32521C6683+***	830	1300	1000
		0.10	$6.0 \times 12.0 \times 13.0$	B32521C6104+***	680	1100	1000

▽ Wound capacitor technology

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

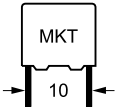
J = $\pm 5\%$

*** = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (lead length 6 – 1 mm)


B32521
General purpose (stacked/wound)
Ordering codes and packing units (lead spacing 10 mm)

V_R	V_{rms} $f \leq 60 \text{ Hz}$	C_R	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
VDC	VAC	μF					
630	200	0.0068 ▽	$4.0 \times 9.0 \times 13.0$	B32521N8682+***	1000	1700	1000
		0.010 ▽	$4.0 \times 9.0 \times 13.0$	B32521N8103+***	1000	1700	1000
		0.015 ▽	$5.0 \times 11.0 \times 13.0$	B32521N8153+***	830	1300	1000
		0.022 ▽	$5.0 \times 11.0 \times 13.0$	B32521N8223+***	830	1300	1000
		0.033 ▽	$6.0 \times 12.0 \times 13.0$	B32521N8333+***	680	1100	1000

▽ Wound capacitor technology

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

 M = $\pm 20\%$

 K = $\pm 10\%$

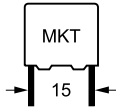
 J = $\pm 5\%$

*** = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (lead length 6 – 1 mm)


Ordering codes and packing units (lead spacing 15 mm)

V_R	V_{rms} $f \leq 60 \text{ Hz}$ VDC	C_R μF	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
63	40	0.68	$5.0 \times 10.5 \times 18.0$	B32522C0684+***	1170	1300	1000
		1.0	$5.0 \times 10.5 \times 18.0$	B32522C0105+***	1170	1300	1000
		1.5	$5.0 \times 10.5 \times 18.0$	B32522C0155+***	1170	1300	1000
		2.2	$5.0 \times 10.5 \times 18.0$	B32522C0225+***	1170	1300	1000
		3.3	$6.0 \times 11.0 \times 18.0$	B32522C0335+***	960	1100	1000
		4.7	$7.0 \times 12.5 \times 18.0$	B32522C0475+***	830	900	1000
		6.8	$8.5 \times 14.5 \times 18.0$	B32522C0685+***	680	700	500
		10	$9.0 \times 17.5 \times 18.0$	B32522C0106+***	640	700	500
100	63	0.33	$5.0 \times 10.5 \times 18.0$	B32522C1334+***	1170	1300	1000
		0.47	$5.0 \times 10.5 \times 18.0$	B32522C1474+***	1170	1300	1000
		0.68	$5.0 \times 10.5 \times 18.0$	B32522C1684+***	1170	1300	1000
		1.0	$5.0 \times 10.5 \times 18.0$	B32522C1105+***	1170	1300	1000
		1.0 ▽	$6.0 \times 11.0 \times 18.0$	B32522Q1105+***	960	1100	1000
		1.5	$6.0 \times 11.0 \times 18.0$	B32522C1155+***	960	1100	1000
		1.5 ▽	$7.0 \times 12.5 \times 18.0$	B32522Q1155+***	830	900	1000
		2.2	$7.0 \times 12.5 \times 18.0$	B32522C1225+***	830	900	1000
		2.2 ▽	$8.5 \times 14.5 \times 18.0$	B32522Q1225+***	680	700	500
		3.3	$8.5 \times 14.5 \times 18.0$	B32522C1335+***	680	700	500
		3.3 ▽	$9.0 \times 17.5 \times 18.0$	B32522Q1335+***	640	700	500
		4.7	$9.0 \times 17.5 \times 18.0$	B32522C1475+***	640	700	500
		4.7 ▽	$11.0 \times 18.5 \times 18.0$	B32522Q1475+***	—	550	300
250	160	0.10	$5.0 \times 10.5 \times 18.0$	B32522C3104+***	1170	1300	1000
		0.15	$5.0 \times 10.5 \times 18.0$	B32522C3154+***	1170	1300	1000
		0.22	$5.0 \times 10.5 \times 18.0$	B32522C3224+***	1170	1300	1000
		0.33	$5.0 \times 10.5 \times 18.0$	B32522C3334+***	1170	1300	1000
		0.47	$6.0 \times 11.0 \times 18.0$	B32522C3474+***	960	1100	1000
		0.68	$7.0 \times 12.5 \times 18.0$	B32522C3684+***	830	900	1000
		1.0	$8.5 \times 14.5 \times 18.0$	B32522C3105+***	680	700	500
		1.0 ▽	$8.5 \times 14.5 \times 18.0$	B32522N3105+***	680	700	500
		1.5	$9.0 \times 17.5 \times 18.0$	B32522C3155+***	640	700	500
		1.5 ▽	$9.0 \times 17.5 \times 18.0$	B32522N3155+***	640	700	500

▽ Wound capacitor technology

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

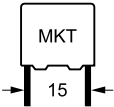
J = $\pm 5\%$

*** = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (lead length 6 – 1 mm)


B32522
General purpose (stacked/wound)
Ordering codes and packing units (lead spacing 15 mm)

V_R	V_{rms} $f \leq 60 \text{ Hz}$ VDC	C_R μF	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
400	200	0.047	$5.0 \times 10.5 \times 18.0$	B32522C6473+***	1170	1300	1000
		0.068	$5.0 \times 10.5 \times 18.0$	B32522C6683+***	1170	1300	1000
		0.10	$5.0 \times 10.5 \times 18.0$	B32522C6104+***	1170	1300	1000
		0.15	$6.0 \times 11.0 \times 18.0$	B32522C6154+***	960	1100	1000
		0.22	$7.0 \times 12.5 \times 18.0$	B32522C6224+***	830	900	1000
		0.33	$8.5 \times 14.5 \times 18.0$	B32522C6334+***	680	700	500
450	200	0.10 ▽	$5.0 \times 10.5 \times 18.0$	B32522N6104+***	1170	1300	1000
		0.15 ▽	$5.0 \times 10.5 \times 18.0$	B32522N6154+***	1170	1300	1000
		0.22 ▽	$6.0 \times 11.0 \times 18.0$	B32522N6224+***	960	1100	1000
		0.33 ▽	$7.0 \times 12.5 \times 18.0$	B32522N6334+***	830	900	1000
		0.47 ▽	$8.5 \times 14.5 \times 18.0$	B32522N6474+***	680	700	500
		0.47 ▽	$8.0 \times 14.0 \times 18.0$	B32522T6474+***	—	750	500
		0.68 ▽	$9.0 \times 17.5 \times 18.0$	B32522N6684+***	640	700	500
		0.68 ▽	$13.0 \times 14.0 \times 18.0$	B32522T6684+***	—	500	300
		1.0 ▽	$11.0 \times 18.5 \times 18.0$	B32522N6105+***	—	550	300
630	200	0.033 ▽	$5.0 \times 10.5 \times 18.0$	B32522Q8333+***	1170	1300	1000
		0.047 ▽	$5.0 \times 10.5 \times 18.0$	B32522Q8473+***	1170	1300	1000
		0.068 ▽	$6.0 \times 11.0 \times 18.0$	B32522Q8683+***	960	1100	1000
		0.10 ▽	$7.0 \times 12.5 \times 18.0$	B32522Q8104+***	830	900	1000
		0.15 ▽	$8.5 \times 14.5 \times 18.0$	B32522Q8154+***	680	700	500
		0.15 ▽	$8.0 \times 14.0 \times 18.0$	B32522T8154+***	—	750	500
		0.22 ▽	$9.0 \times 17.5 \times 18.0$	B32522Q8224+***	640	700	500
		0.33 ▽	$11.0 \times 18.5 \times 18.0$	B32522Q8334+***	—	550	300

▽ Wound capacitor technology

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

 M = $\pm 20\%$

 K = $\pm 10\%$

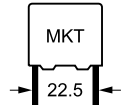
 J = $\pm 5\%$

*** = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (lead length 6 – 1 mm)



Ordering codes and packing units (lead spacing 22.5 mm)

V_R	V_{rms} $f \leq 60 \text{ Hz}$	C_R	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
VDC	VAC	μF					
63	40	3.3	$6.0 \times 15.0 \times 26.5$	B32523Q0335+***	680	700	720
		4.7	$7.0 \times 16.0 \times 26.5$	B32523Q0475+***	580	600	630
		6.8	$8.5 \times 16.5 \times 26.5$	B32523Q0685+***	480	500	510
		10	$10.5 \times 18.5 \times 26.5$	B32523Q0106+***	390	400	540
		15	$12.0 \times 22.0 \times 26.5$	B32523Q0156+***	—	—	450
100	63	1.5	$6.0 \times 15.0 \times 26.5$	B32523Q1155+***	680	700	720
		2.2	$6.0 \times 15.0 \times 26.5$	B32523Q1225+***	680	700	720
		3.3	$6.0 \times 15.0 \times 26.5$	B32523Q1335+***	680	700	720
		4.7	$7.0 \times 16.0 \times 26.5$	B32523Q1475+***	580	600	630
		6.8	$8.5 \times 16.5 \times 26.5$	B32523Q1685+***	480	500	510
		10	$10.5 \times 18.5 \times 26.5$	B32523Q1106+***	390	400	540
250	160	15	$12.0 \times 22.0 \times 26.5$	B32523Q1156+***	—	—	450
		0.47	$6.0 \times 15.0 \times 26.5$	B32523Q3474+***	680	700	720
		0.68	$6.0 \times 15.0 \times 26.5$	B32523Q3684+***	680	700	720
		1.0	$6.0 \times 15.0 \times 26.5$	B32523Q3105+***	680	700	720
		1.5	$7.0 \times 16.0 \times 26.5$	B32523Q3155+***	580	600	630
		2.2	$10.5 \times 16.5 \times 26.5$	B32523Q3225+***	390	400	540
400	200	3.3	$11.0 \times 20.5 \times 26.5$	B32523Q3335+***	370	350	510
		0.22	$6.0 \times 15.0 \times 26.5$	B32523Q6224+***	680	700	720
		0.33	$6.0 \times 15.0 \times 26.5$	B32523Q6334+***	680	700	720
		0.47	$7.0 \times 16.0 \times 26.5$	B32523Q6474+***	580	600	630
		0.68	$8.5 \times 16.5 \times 26.5$	B32523Q6684+***	480	500	510
		1.0	$10.5 \times 16.5 \times 26.5$	B32523Q6105+***	390	400	540
630	200	1.5	$11.0 \times 20.5 \times 26.5$	B32523Q6155+***	370	350	510
		0.10	$6.0 \times 15.0 \times 26.5$	B32523Q8104+***	680	700	720
		0.15	$6.0 \times 15.0 \times 26.5$	B32523Q8154+***	680	700	720
		0.22	$7.0 \times 16.0 \times 26.5$	B32523Q8224+***	580	600	630
		0.33	$10.5 \times 16.5 \times 26.5$	B32523Q8334+***	390	400	540
		0.47	$10.5 \times 20.5 \times 26.5$	B32523Q8474+***	390	400	540
		0.68	$12.0 \times 22.0 \times 26.5$	B32523Q8684+***	—	—	450

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

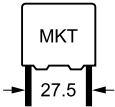
J = $\pm 5\%$

*** = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (lead length 6 – 1 mm)


B32524
General purpose (wound)
Ordering codes and packing units (lead spacing 27.5 mm)

V_R VDC	V_{rms} $f \leq 60$ Hz VAC	C_R μF	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
63	40	4.7	$11.0 \times 21.0 \times 31.5$	B32524Q0475+***	—	350	320
		6.8	$11.0 \times 21.0 \times 31.5$	B32524Q0685+***	—	350	320
		10	$11.0 \times 21.0 \times 31.5$	B32524Q0106+***	—	350	320
		15	$11.0 \times 21.0 \times 31.5$	B32524Q0156+***	—	300	280
		22	$14.0 \times 24.5 \times 31.5$	B32524Q0226+***	—	350	320
		33	$18.0 \times 27.5 \times 31.5$	B32524Q0336+***	—	—	200
		47	$21.0 \times 31.0 \times 31.5$	B32524Q0476+***	—	—	180
		68	$22.0 \times 36.5 \times 31.5$	B32524Q0686+***	—	—	160
100	63	4.7	$11.0 \times 21.0 \times 31.5$	B32524Q1475+***	—	350	320
		6.8	$11.0 \times 21.0 \times 31.5$	B32524Q1685+***	—	350	320
		10	$11.0 \times 21.0 \times 31.5$	B32524Q1106+***	—	350	320
		15	$11.0 \times 21.0 \times 31.5$	B32524Q1156+***	—	300	280
		22	$14.0 \times 24.5 \times 31.5$	B32524Q1226+***	—	350	320
		33	$18.0 \times 27.5 \times 31.5$	B32524Q1336+***	—	—	200
		47	$21.0 \times 31.0 \times 31.5$	B32524Q1476+***	—	—	180
		68	$22.0 \times 36.5 \times 31.5$	B32524Q1686+***	—	—	160
250	160	1.5	$11.0 \times 21.0 \times 31.5$	B32524Q3155+***	—	350	320
		2.2	$11.0 \times 21.0 \times 31.5$	B32524Q3225+***	—	350	320
		3.3	$11.0 \times 21.0 \times 31.5$	B32524Q3335+***	—	350	320
		4.7	$11.0 \times 21.0 \times 31.5$	B32524Q3475+***	—	350	320
		6.8	$14.0 \times 24.5 \times 31.5$	B32524Q3685+***	—	250	260
		10	$18.0 \times 27.5 \times 31.5$	B32524Q3106+***	—	—	200
		15	$19.0 \times 30.0 \times 31.5$	B32524Q3156+***	—	—	180
400	200	0.68	$11.0 \times 19.0 \times 31.5$	B32524Q6684+***	—	350	320
		1.0	$11.0 \times 19.0 \times 31.5$	B32524Q6105+***	—	350	320
		1.5	$11.0 \times 19.0 \times 31.5$	B32524Q6155+***	—	350	320
		2.2	$12.5 \times 21.5 \times 31.5$	B32524Q6225+***	—	300	280
		3.3	$15.0 \times 24.5 \times 31.5$	B32524Q6335+***	—	—	240
		4.7	$18.0 \times 27.5 \times 31.5$	B32524Q6475+***	—	—	200
		6.8	$21.0 \times 31.0 \times 31.5$	B32524Q6685+***	—	—	180

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

 M = $\pm 20\%$

 K = $\pm 10\%$

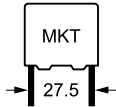
 J = $\pm 5\%$

*** = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (lead length 6 – 1 mm)



Ordering codes and packing units (lead spacing 27.5 mm)

V_R	V_{rms} $f \leq 60 \text{ Hz}$	C_R	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
VDC	VAC	μF					
630	220	0.33	$11.0 \times 21.0 \times 31.5$	B32524Q8334+***	—	350	320
		0.47	$11.0 \times 21.0 \times 31.5$	B32524Q8474+***	—	350	320
		0.68	$11.0 \times 21.0 \times 31.5$	B32524Q8684+***	—	350	320
		1.0	$14.0 \times 24.5 \times 31.5$	B32524Q8105+***	—	250	260
		1.5	$18.0 \times 27.5 \times 31.5$	B32524Q8155+***	—	—	200
		2.2	$21.0 \times 31.0 \times 31.5$	B32524Q8225+***	—	—	180

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

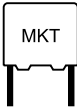
J = $\pm 5\%$

*** = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (lead length 6 – 1 mm)


B32520 ... B32529
General purpose (stacked/wound)
Technical data

Operating temperature range	Max. operating temperature $T_{op,max}$ +125 °C Upper category temperature T_{max} +125 °C Lower category temperature T_{min} −55 °C Rated temperature T_R +85 °C			
Dissipation factor $\tan \delta$ (in 10 ^{−3}) at 20 °C (upper limit values)	at	$C_R \leq 0.1 \mu F$	$0.1 \mu F < C_R \leq 1 \mu F$	$C_R > 1 \mu F$
	1 kHz	8	8	10
	10 kHz	15	15	—
	100 kHz	30	—	—
Insulation resistance R_{ins} or time constant $\tau = C_R \cdot R_{ins}$ at 20 °C, rel. humidity $\leq 65\%$ (minimum as-delivered values)	V_R	$C_R \leq 0.33 \mu F$		$C_R > 0.33 \mu F$
	≤ 100 VDC	3750 M Ω		1250 s
	≥ 250 VDC	7500 M Ω		2500 s
DC test voltage	1.4 · V_R , 2 s			
Category voltage V_C (continuous operation with V_{DC} or V_{AC} at $f \leq 60$ Hz)	T_A (°C)	DC voltage derating		AC voltage derating
	$T_A \leq 85$	$V_C = V_R$		$V_{C,rms} = V_{rms}$
	$85 < T_A \leq 125$	$V_C = V_R \cdot (165 - T_A)/80$		$V_{C,rms} = V_{rms} \cdot (165 - T_A)/80$
Operating voltage V_{op} for short operating periods (V_{DC} or V_{AC} at $f \leq 60$ Hz)	T_A (°C)	DC voltage (max. hours)		AC voltage (max. hours)
	$T_A \leq 100$	$V_{op} = 1.25 \cdot V_C$ (2000 h)		$V_{op} = 1.0 \cdot V_{C,rms}$ (2000 h)
	$100 < T_A \leq 125$	$V_{op} = 1.25 \cdot V_C$ (1000 h)		$V_{op} = 1.0 \cdot V_{C,rms}$ (1000 h)
Damp heat test	56 days/40 °C/93% relative humidity			
Limit values after damp heat test	Capacitance change $ \Delta C/C $		$\leq 5\%$	
	Dissipation factor change $\Delta \tan \delta$		$\leq 5 \cdot 10^{-3}$ (at 1 kHz)	
	Insulation resistance R_{ins}		$\geq 50\%$ of minimum	
	or time constant $\tau = C_R \cdot R_{ins}$		as-delivered values	
Reliability:				
Failure rate λ	1 fit ($\leq 1 \cdot 10^{-9}/h$) at 0.5 · V_R , 40 °C			
Service life t_{sL}	200 000 h at 1.0 · V_R , 40 °C			
	For conversion to other operating conditions and temperatures, refer to chapter "Quality assurance", page .			
Failure criteria:				
Total failure	Short circuit or open circuit			
Failure due to variation of parameters	Capacitance change $ \Delta C/C $		$> 10\%$	
	Dissipation factor $\tan \delta$		$> 2 \cdot$ upper limit value	
	Insulation resistance R_{ins}		< 150 M Ω ($C_R \leq 0.33 \mu F$)	
	or time constant $\tau = C_R \cdot R_{ins}$		< 50 s ($C_R > 0.33 \mu F$)	

Pulse handling capability

"dV/dt" represents the maximum permissible voltage change per unit of time for non-sinusoidal voltages, expressed in V/ μ s.

"k₀" represents the maximum permissible pulse characteristic of the waveform applied to the capacitor, expressed in V²/ μ s.

Note:

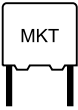
The values of dV/dt and k₀ provided below must not be exceeded in order to avoid damaging the capacitor.

dV/dt values

Lead spacing		5 mm	7.5 mm	10 mm		15 mm		22.5 mm	27.5 mm
Technology		Stacked	Stacked	Stacked	Wound	Stacked	Wound	Wound	Wound
V _R	V _{rms}	dV/dt in V/ μ s							
VDC	VAC								
50	32	200	—	—	—	—	—	—	—
63	40	250	120	50	—	30	—	3	1
100	63	300	150	75	—	50	5	4	3
250	160	400	200	150	—	100	10	6	4.5
400	200	600	275	175	—	125	—	10	7.5
450	200	—	—	—	—	—	20	—	—
630	400	800	—	—	20	—	25	15	12

k₀ values

Lead spacing		5 mm	7.5 mm	10 mm		15 mm		22.5 mm	27.5 mm
Technology		Stacked	Stacked	Stacked	Wound	Stacked	Wound	Wound	Wound
V _R	V _{rms}	k ₀ in V ² / μ s							
VDC	VAC								
50	32	20 000	—	—	—	—	—	—	—
63	40	30 000	15 000	6 300	—	3 800	—	375	130
100	63	60 000	30 000	15 000	—	10 000	850	750	600
250	160	200 000	100 000	75 000	—	50 000	5 000	3 000	2 250
400	200	500 000	220 000	140 000	—	100 000	—	8 000	6 000
450	200	—	—	—	—	—	15 000	—	—
630	400	1 000 000	—	—	25 000	—	30 000	18 000	15 000

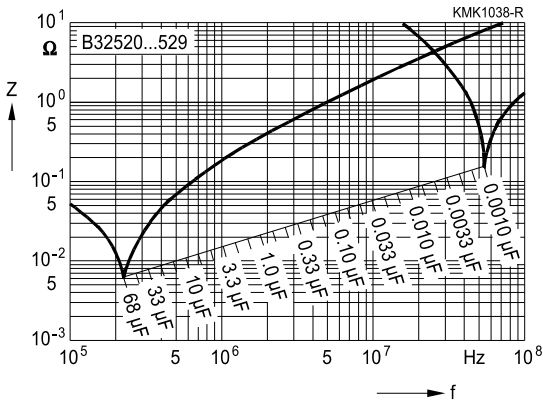


B32520 ... B32529

General purpose (stacked/wound)

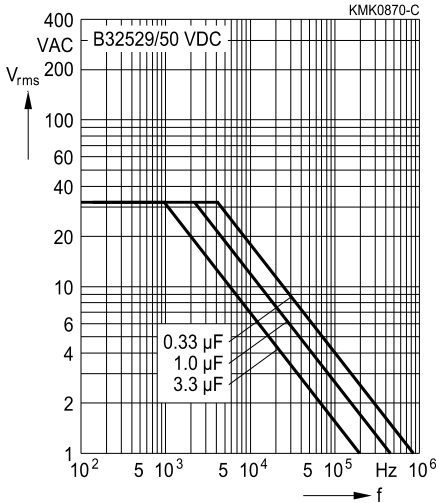
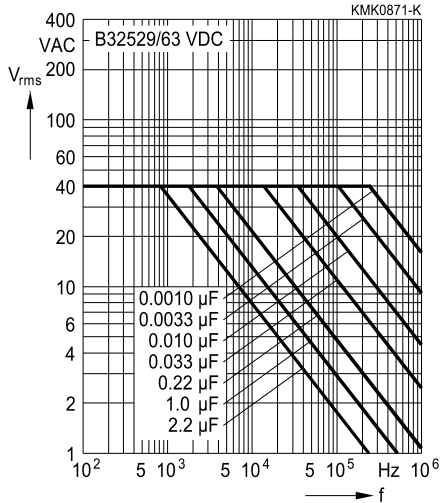
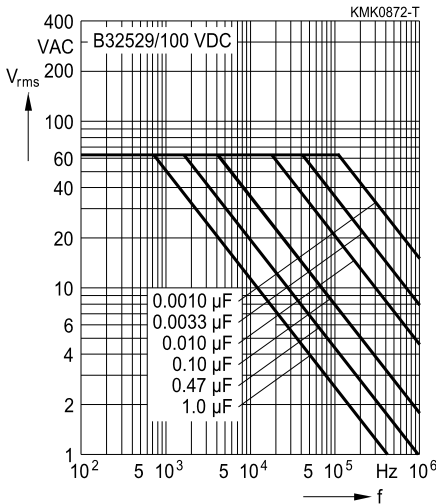
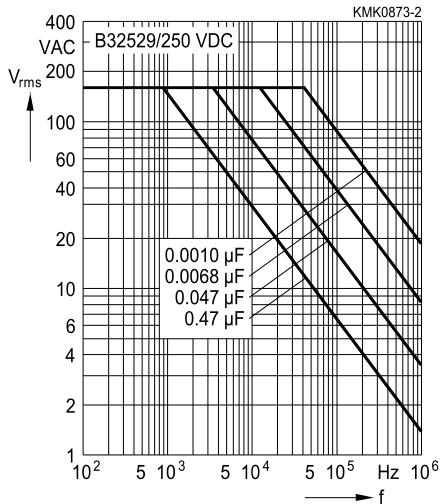
Impedance Z versus frequency f

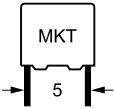
(typical values)



Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55^\circ\text{C}$)

For $T_A > 55^\circ\text{C}$, please refer to "General technical information", section 3.2.3.

Lead spacing 5 mm
50 VDC/32 VAC

63 VDC/40 VAC

100 VDC/63 VAC

250 VDC/160 VAC




B32529

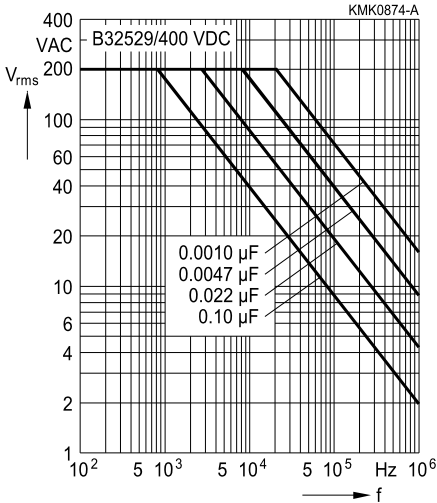
General purpose (stacked)

Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55^\circ\text{C}$)

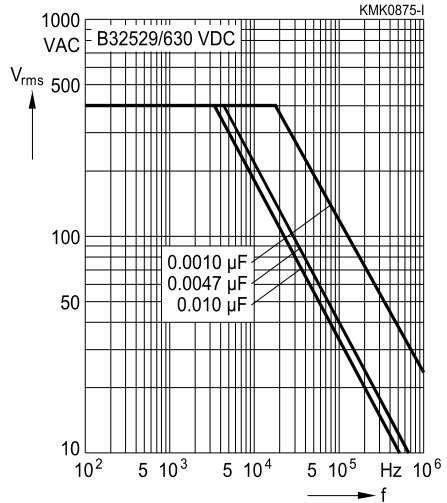
For $T_A > 55^\circ\text{C}$, please refer to "General technical information", section 3.2.3.

Lead spacing 5 mm

400 VDC/200 VAC

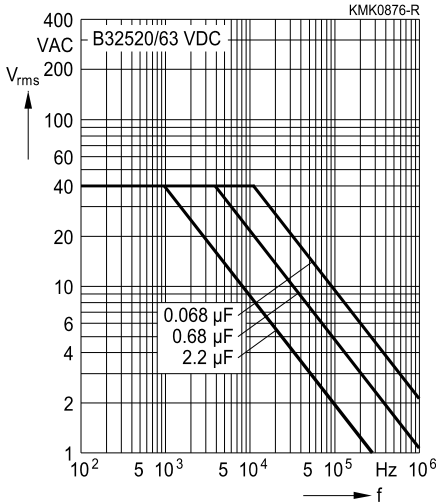
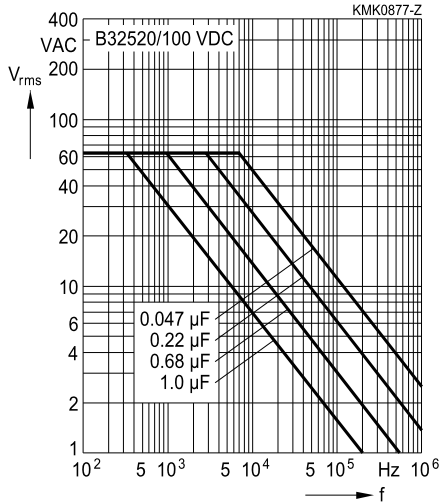
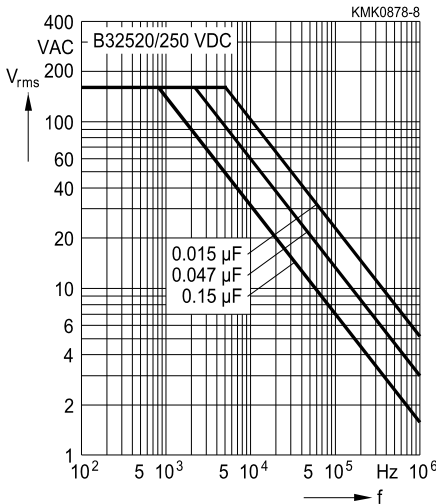
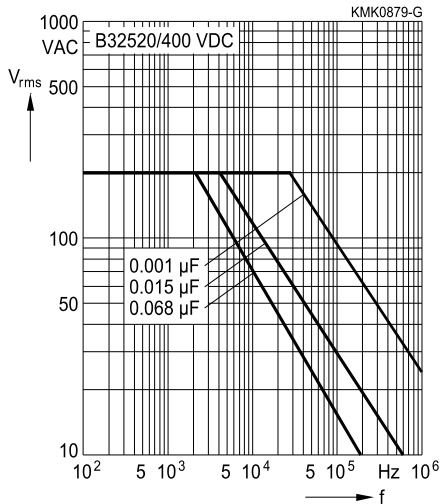


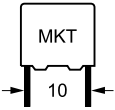
630 VDC/400 VAC



Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55^\circ\text{C}$)

For $T_A > 55^\circ\text{C}$, please refer to "General technical information", section 3.2.3.

Lead spacing 7.5 mm
63 VDC/40 VAC

100 VDC/63 VAC

250 VDC/160 VAC

400 VDC/200 VAC




B32521

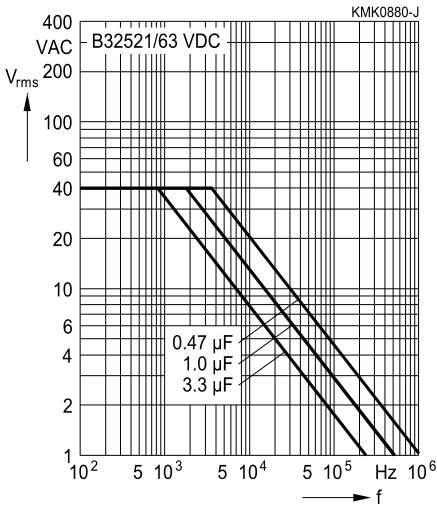
General purpose (stacked/wound)

Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55^\circ\text{C}$)

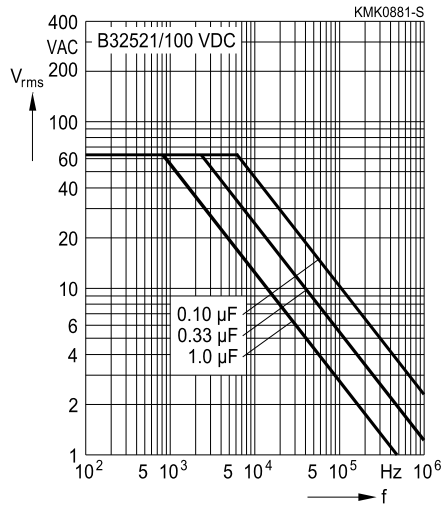
For $T_A > 55^\circ\text{C}$, please refer to "General technical information", section 3.2.3.

Lead spacing 10 mm

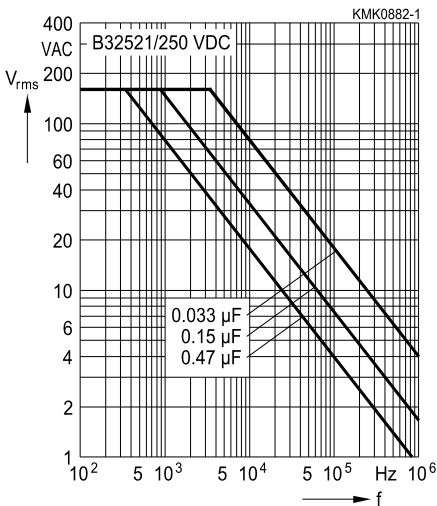
63 VDC/40 VAC



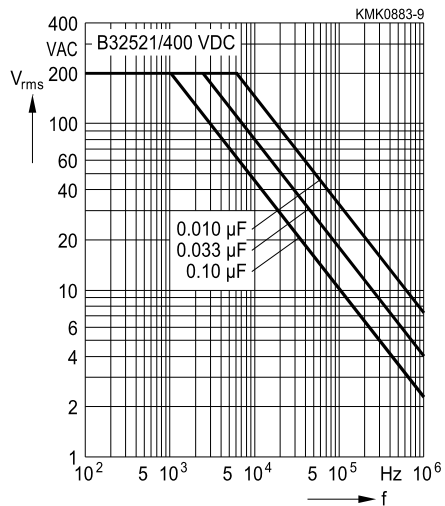
100 VDC/63 VAC

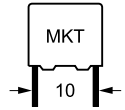


250 VDC/160 VAC



400 VDC/200 VAC



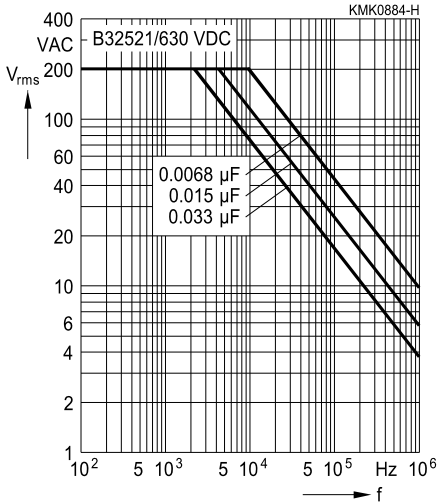


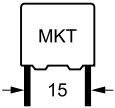
Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55^\circ\text{C}$)

For $T_A > 55^\circ\text{C}$, please refer to "General technical information", section 3.2.3.

Lead spacing 10 mm

630 VDC/200 VAC





B32522

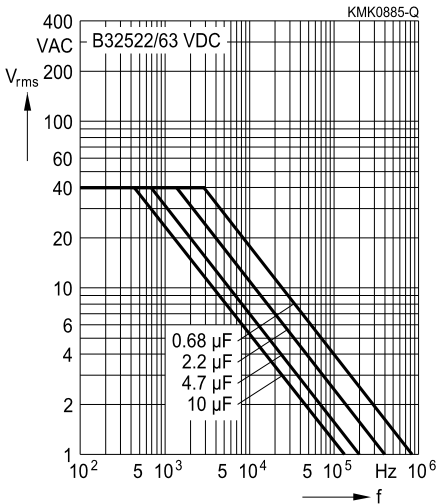
General purpose (stacked/wound)

Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55^\circ\text{C}$)

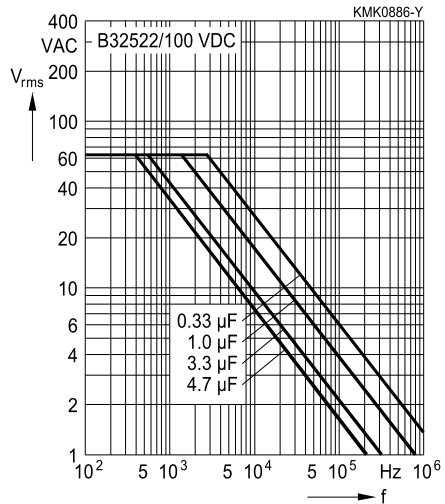
For $T_A > 55^\circ\text{C}$, please refer to "General technical information", section 3.2.3.

Lead spacing 15 mm

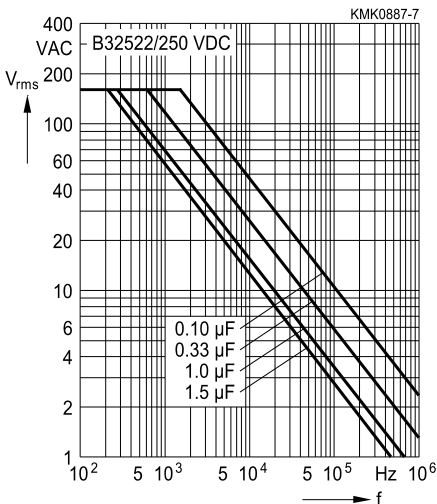
63 VDC/40 VAC



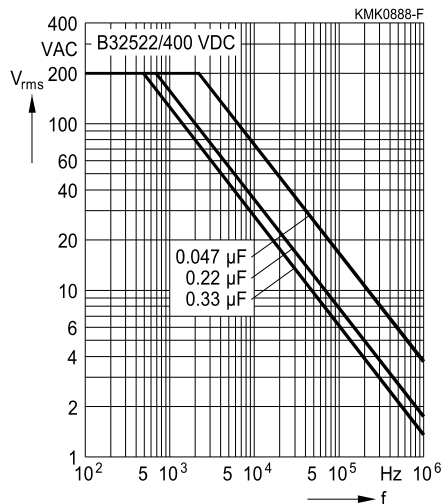
100 VDC/63 VAC

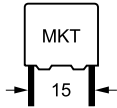


250 VDC/160 VAC



400 VDC/200 VAC



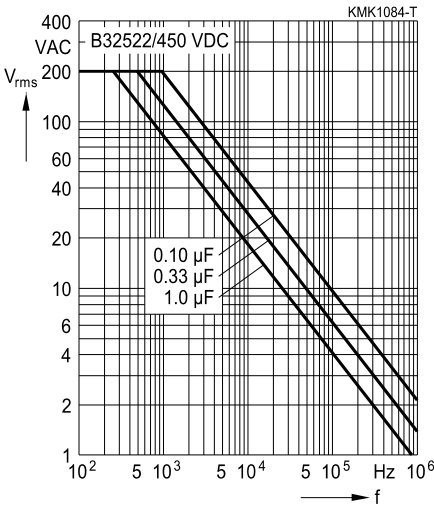


Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55^\circ\text{C}$)

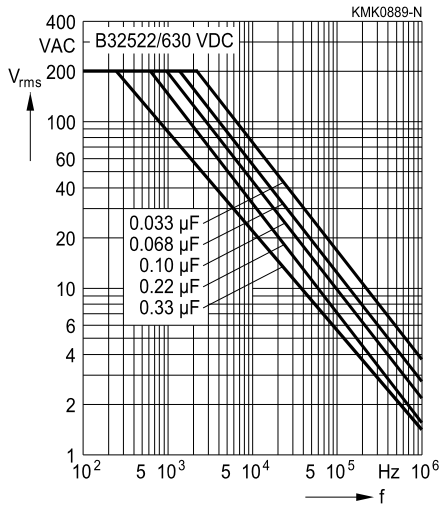
For $T_A > 55^\circ\text{C}$, please refer to "General technical information", section 3.2.3.

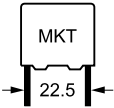
Lead spacing 15 mm

450 VDC/200 VAC



630 VDC/200 VAC





B32523

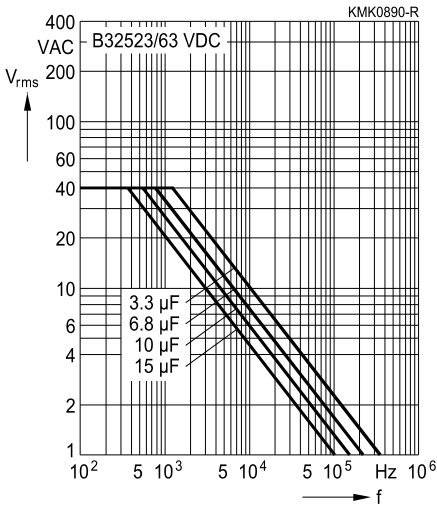
General purpose (wound)

Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55^\circ\text{C}$)

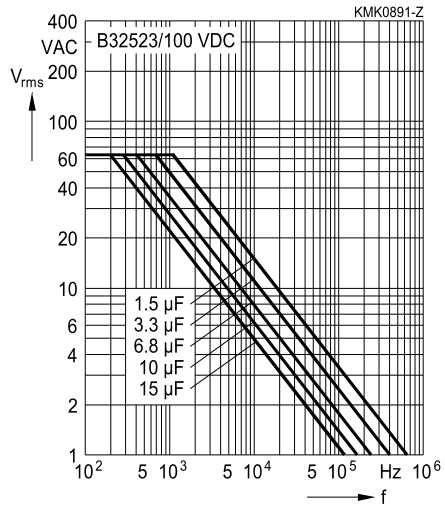
For $T_A > 55^\circ\text{C}$, please refer to "General technical information", section 3.2.3.

Lead spacing 22.5 mm

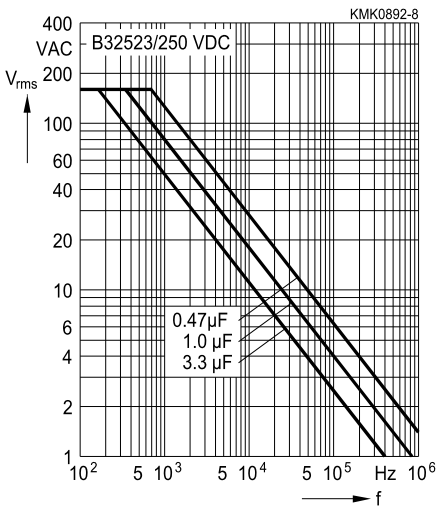
63 VDC/40 VAC



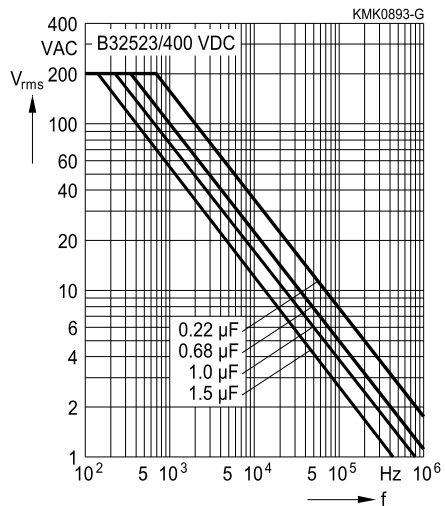
100 VDC/63 VAC

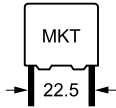


250 VDC/160 VAC



400 VDC/200 VAC



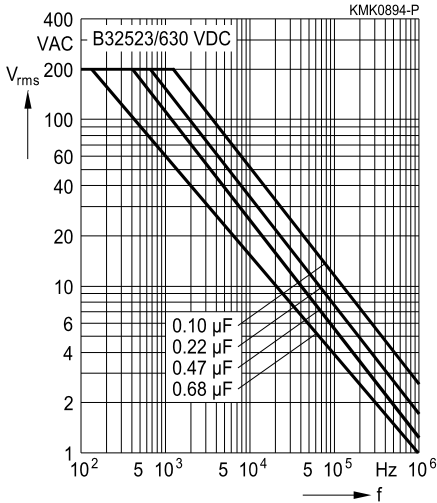


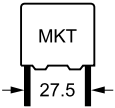
Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55^\circ\text{C}$)

For $T_A > 55^\circ\text{C}$, please refer to "General technical information", section 3.2.3.

Lead spacing 22.5 mm

630 VDC/200 VAC





B32524

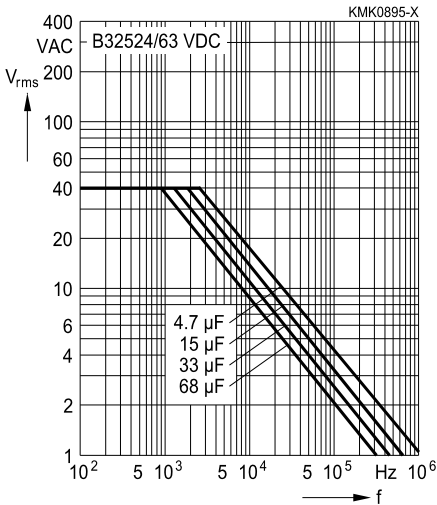
General purpose (wound)

Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55^\circ\text{C}$)

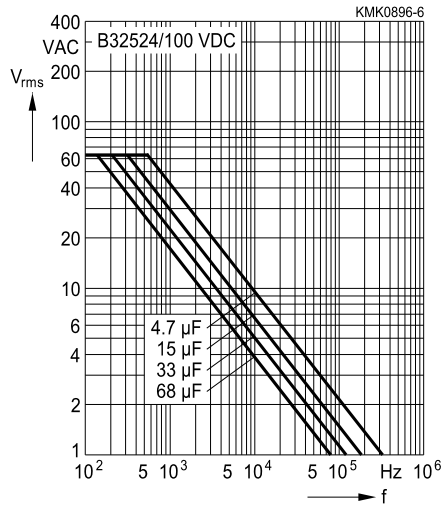
For $T_A > 55^\circ\text{C}$, please refer to "General technical information", section 3.2.3.

Lead spacing 27.5 mm

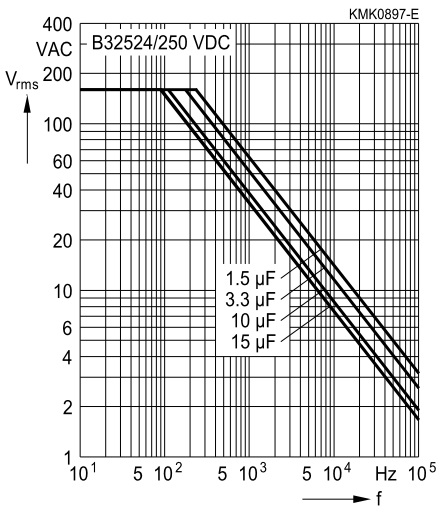
63 VDC/40 VAC



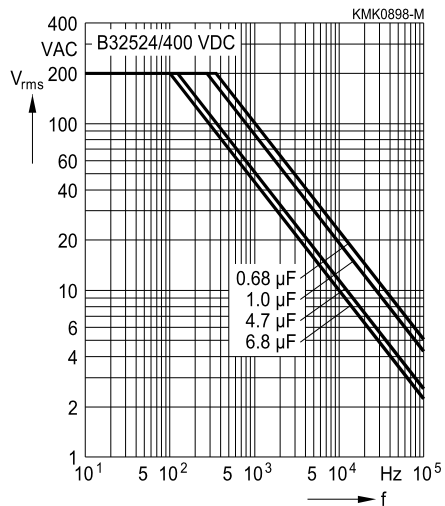
100 VDC/63 VAC

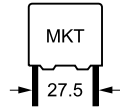


250 VDC/160 VAC



400 VDC/200 VAC





Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55^\circ\text{C}$)

For $T_A > 55^\circ\text{C}$, please refer to "General technical information", section 3.2.3.

Lead spacing 27.5 mm

630 VDC/220 VAC

