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# Film Capacitors

## Metallized Polyester Film Capacitors (MKT)

**Series/Type:** B32520 ... B32529

**Date:** April 2015

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**General purpose (stacked/wound)**
**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 C, D or E in digit 7 of ordering code
- Wound capacitor technology for lead spacing 10 to 37.5 mm  
= code N, Q or R 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
- RoHS-compatible
- Halogen-free capacitors available on request

**Terminals**

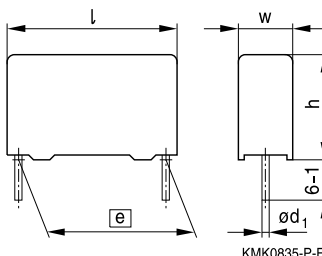
- Parallel wire leads, lead-free tinned
- Special lead lengths available on request

**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**

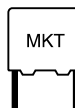
Bulk (untaped)  
Taped (Ammo pack or reel)  
For notes on taping, refer to chapter "Taping and packing".

**Dimensional drawing**


Dimensions in mm

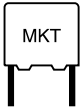
Lead spacing $e \pm 0.4$	Lead diameter $d_1 \pm 0.05$	Type
5.0	0.5	B32529
7.5	0.5	B32520
10.0	0.6 <sup>1)</sup>	B32521
15.0	0.8	B32522
22.5	0.8	B32523
27.5	0.8	B32524
37.5	1.0	B32526

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	6						9				10				
Technology	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s
$V_R$ (V DC)	50	63	100	250	400	630	63	100	250	400	63	100	250	400	630
$V_{RMS}$ (V AC)	32	40	63	160	200	400	40	63	160	200	40	63	160	200	200
$C_R$ ( $\mu$ F)															
0.0010															
0.0015															
0.0022															
0.0033															
0.0047															
0.0068															
0.010															
0.015															
0.022															
0.033															
0.047															
0.056															
0.068															
0.082															
0.10															
0.12															
0.15															
0.18															
0.22															
0.33															
0.47															
0.68															
1.0															
1.5															
2.2															
3.3															
4.7															

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



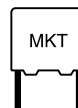
**B32520 ... B32529**

**General purpose (stacked/wound)**

**Overview of available types**

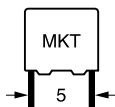
Lead spacing	15.0 mm						22.5 mm					27.5 mm				
Type	B32522						B32523					B32524				
Page	12						14					15				
Technology	s	s/w	s/w	s	w	s	w	w	w	w	w	w	w	w	w	w
V <sub>R</sub> (V DC)	63	100	250	400	450	630	63	100	250	400	630	63	100	250	400	630
V <sub>RMS</sub> (V AC)	40	63	160	200	200	200	40	63	160	200	200	40	63	160	200	220
C <sub>R</sub> (μF)																
0.047																
0.068																
0.10																
0.15																
0.22																
0.33																
0.39																
0.47																
0.56																
0.68																
1.0																
1.5																
2.2																
3.3																
4.7																
6.8																
10																
15																
22																
33																
47																
68																
100																

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


**Overview of available types**

Lead spacing	37.5 mm			
Type	B32526			
Page	17			
Technology	w	w	w	w
$V_R$ (V DC)	63	100	250	400
$V_{RMS}$ (V AC)	40	63	160	200
$C_R$ ( $\mu$ F)				
3.3				
4.7				
5.6				
6.8				
8.2				
10				
15				
22				
33				
47				
56				
68				
82				
100				
150				
220				

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


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

$V_R$	$V_{RMS}$ $f \leq 60$ Hz	$C_R$	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./MOQ	Reel pcs./ MOQ	Untaped pcs./ MOQ
V DC	V AC	$\mu F$					
50	32	3.3	7.8 × 13.0 × 7.8	B32529D5335+***	4000	3200	4000
		4.7	7.8 × 13.0 × 7.8	B32529D5475M***	4000	3200	4000
63	40	0.0010	2.5 × 6.5 × 7.3	B32529C0102+***	12800	11200	8000
		0.0015	2.5 × 6.5 × 7.3	B32529C0152+***	12800	11200	8000
		0.0022	2.5 × 6.5 × 7.3	B32529C0222+***	12800	11200	8000
		0.0033	2.5 × 6.5 × 7.3	B32529C0332+***	12800	11200	8000
		0.0047	2.5 × 6.5 × 7.3	B32529C0472+***	12800	11200	8000
		0.0068	2.5 × 6.5 × 7.3	B32529C0682+***	12800	11200	8000
		0.010	2.5 × 6.5 × 7.3	B32529C0103+***	12800	11200	8000
		0.015	2.5 × 6.5 × 7.3	B32529C0153+***	12800	11200	8000
		0.022	2.5 × 6.5 × 7.3	B32529C0223+***	12800	11200	8000
		0.033	2.5 × 6.5 × 7.3	B32529C0333+***	12800	11200	8000
		0.047	2.5 × 6.5 × 7.3	B32529C0473+***	12800	11200	8000
		0.068	2.5 × 6.5 × 7.3	B32529C0683+***	12800	11200	8000
		0.10	2.5 × 6.5 × 7.3	B32529C0104+***	12800	11200	8000
		0.15	2.5 × 6.5 × 7.3	B32529C0154+***	12800	11200	8000
		0.22	2.5 × 6.5 × 7.3	B32529C0224+***	12800	11200	8000
		0.33	3.0 × 6.5 × 7.3	B32529C0334+***	10800	9600	8000
		0.47	3.5 × 8.0 × 7.3	B32529C0474+***	9200	8000	8000
0.68	4.5 × 9.5 × 7.3	B32529C0684+***	7200	6000	6000		
1.0	4.5 × 9.5 × 7.3	B32529C0105+***	7200	6000	6000		
1.5	6.0 × 10.5 × 7.5	B32529C0155+***	5200	4400	4000		
2.2	7.8 × 13.0 × 7.8	B32529D0225+***	4000	3200	4000		
100	63	0.0010	2.5 × 6.5 × 7.3	B32529C1102+***	12800	11200	8000
		0.0015	2.5 × 6.5 × 7.3	B32529C1152+***	12800	11200	8000
		0.0022	2.5 × 6.5 × 7.3	B32529C1222+***	12800	11200	8000
		0.0033	2.5 × 6.5 × 7.3	B32529C1332+***	12800	11200	8000
		0.0047	2.5 × 6.5 × 7.3	B32529C1472+***	12800	11200	8000
		0.0068	2.5 × 6.5 × 7.3	B32529C1682+***	12800	11200	8000
		0.010	2.5 × 6.5 × 7.3	B32529C1103+***	12800	11200	8000
		0.015	2.5 × 6.5 × 7.3	B32529C1153+***	12800	11200	8000

MOQ = Minimum Order Quantity, consisting of 4 packing units.  
Further E series and intermediate capacitance values on request.

**Composition of ordering code**

+ = Capacitance tolerance code:

M = ±20%

K = ±10%

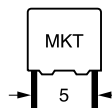
J = ±5%

\*\*\* = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (standard lead length 6 – 1 mm)


**Ordering codes and packing units (lead spacing 5 mm)**

$V_R$	$V_{RMS}$ $f \leq 60$ Hz	$C_R$	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./MOQ	Reel pcs./ MOQ	Untaped pcs./ MOQ
V DC	V AC	$\mu F$					
100	63	0.022	2.5 × 6.5 × 7.3	B32529C1223+***	12800	11200	8000
		0.033	2.5 × 6.5 × 7.3	B32529C1333+***	12800	11200	8000
		0.047	2.5 × 6.5 × 7.3	B32529C1473+***	12800	11200	8000
		0.068	2.5 × 6.5 × 7.3	B32529C1683+***	12800	11200	8000
		0.10	2.5 × 6.5 × 7.3	B32529C1104+***	12800	11200	8000
		0.15	3.0 × 6.5 × 7.3	B32529C1154+***	10800	9600	8000
		0.22	3.5 × 8.0 × 7.3	B32529C1224+***	9200	8000	8000
		0.33	3.5 × 8.0 × 7.3	B32529C1334+***	9200	8000	8000
		0.47	4.5 × 9.5 × 7.3	B32529C1474+***	7200	6000	6000
		0.68	6.0 × 10.5 × 7.5	B32529C1684+***	5200	4400	4000
		1.0	7.8 × 13.0 × 7.8	B32529D1105+***	4000	3200	4000
250	160	0.0010	2.5 × 6.5 × 7.3	B32529C3102+***	12800	11200	8000
		0.0015	2.5 × 6.5 × 7.3	B32529C3152+***	12800	11200	8000
		0.0022	2.5 × 6.5 × 7.3	B32529C3222+***	12800	11200	8000
		0.0033	2.5 × 6.5 × 7.3	B32529C3332+***	12800	11200	8000
		0.0047	2.5 × 6.5 × 7.3	B32529C3472+***	12800	11200	8000
		0.0068	2.5 × 6.5 × 7.3	B32529C3682+***	12800	11200	8000
		0.010	2.5 × 6.5 × 7.3	B32529C3103+***	12800	11200	8000
		0.015	2.5 × 6.5 × 7.3	B32529C3153+***	12800	11200	8000
		0.022	2.5 × 6.5 × 7.3	B32529C3223+***	12800	11200	8000
		0.033	3.0 × 6.5 × 7.3	B32529C3333+***	10800	9600	8000
		0.047	3.5 × 8.0 × 7.3	B32529C3473+***	9200	8000	8000
		0.068	4.5 × 9.5 × 7.3	B32529C3683+***	7200	6000	6000
		0.10	4.5 × 9.5 × 7.3	B32529C3104+***	7200	6000	6000
		0.15	5.0 × 10.0 × 7.5	B32529C3154+***	6400	5600	6000
		0.22	7.8 × 13.0 × 7.8	B32529D3224+***	4000	3200	4000
		0.33	7.8 × 13.0 × 7.8	B32529C3334+***	4000	3200	4000
		0.47	7.8 × 13.0 × 7.8	B32529C3474+***	4000	3200	4000

MOQ = Minimum Order Quantity, consisting of 4 packing units.  
Further E series and intermediate capacitance values on request.

**Composition of ordering code**

+ = Capacitance tolerance code:

M = ±20%

K = ±10%

J = ±5%

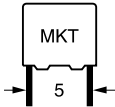
\*\*\* = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (standard lead length 6 – 1 mm)




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

$V_R$	$V_{RMS}$ $f \leq 60$ Hz	$C_R$	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./MOQ	Reel pcs./ MOQ	Untaped pcs./ MOQ
V DC	V AC	$\mu F$					
400	200	0.0010	2.5 × 6.5 × 7.3	B32529C6102+***	12800	11200	8000
		0.0015	2.5 × 6.5 × 7.3	B32529C6152+***	12800	11200	8000
		0.0022	2.5 × 6.5 × 7.3	B32529C6222+***	12800	11200	8000
		0.0033	2.5 × 6.5 × 7.3	B32529C6332+***	12800	11200	8000
		0.0047	2.5 × 6.5 × 7.3	B32529C6472+***	12800	11200	8000
		0.0068	2.5 × 6.5 × 7.3	B32529C6682+***	12800	11200	8000
		0.010	3.0 × 6.5 × 7.3	B32529E6103+***	10800	9600	8000
		0.015	3.0 × 6.5 × 7.3	B32529E6153+***	10800	9600	8000
		0.022	3.5 × 8.0 × 7.3	B32529E6223+***	9200	8000	8000
		0.033	4.5 × 9.5 × 7.3	B32529E6333+***	7200	6000	6000
		0.047	4.5 × 9.5 × 7.3	B32529E6473+***	7200	6000	6000
		0.068	6.0 × 10.5 × 7.5	B32529E6683+***	5200	4400	4000
		0.10	7.8 × 13.0 × 7.8	B32529E6104+***	4000	3200	4000
		0.15	7.8 × 13.0 × 7.8	B32529E6154+***	4000	3200	4000
630	400	0.0010	2.5 × 6.5 × 7.3	B32529C8102+***	12800	11200	8000
		0.0015	2.5 × 6.5 × 7.3	B32529C8152+***	12800	11200	8000
		0.0022	2.5 × 6.5 × 7.3	B32529C8222+***	12800	11200	8000
		0.0033	3.5 × 8.0 × 7.3	B32529C8332+***	9200	8000	8000
		0.0047	3.5 × 8.0 × 7.3	B32529C8472+***	9200	8000	8000
		0.0068	3.5 × 8.0 × 7.3	B32529C8682+***	9200	8000	8000
		0.010	5.0 × 10.0 × 7.5	B32529C8103+***	6400	5600	6000
		0.015	5.0 × 10.0 × 7.5	B32529C8153+***	6400	5600	6000
		0.022	7.8 × 13.0 × 7.8	B32529C8223+***	5200	4400	4000
		0.033	7.8 × 13.0 × 7.8	B32529C8333+***	4000	3200	4000

MOQ = Minimum Order Quantity, consisting of 4 packing units.

Further E series and intermediate capacitance values on request.

**Composition of ordering code**

+ = Capacitance tolerance code:

M = ±20%

K = ±10%

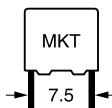
J = ±5%

\*\*\* = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (standard lead length 6 – 1 mm)


**Ordering codes and packing units (lead spacing 7.5 mm)**

$V_R$	$V_{RMS}$ $f \leq 60$ Hz	$C_R$	Max. dimensions $w \times h \times l$	Ordering code (composition see below)	Ammo pack	Reel pcs./ MOQ	Untaped pcs./ MOQ
V DC	V AC	$\mu F$	mm		pcs./MOQ		
63	40	0.47	$3.0 \times 8.0 \times 10.0$	B32520C0474+***	10400	9600	8000
		0.68	$4.0 \times 8.5 \times 10.0$	B32520C0684+***	8000	7200	6000
		1.0	$5.0 \times 10.5 \times 10.0$	B32520C0105+***	6400	5600	4000
		1.5	$5.0 \times 10.5 \times 10.0$	B32520C0155+***	6400	5600	4000
		2.2	$6.0 \times 12.0 \times 10.3$	B32520C0225+***	5200	4400	3000
100	63	0.15	$3.0 \times 8.0 \times 10.0$	B32520C1154+***	10400	9600	8000
		0.22	$3.0 \times 8.0 \times 10.0$	B32520C1224+***	10400	9600	8000
		0.33	$4.0 \times 8.5 \times 10.0$	B32520C1334+***	8000	7200	6000
		0.47	$5.0 \times 10.5 \times 10.0$	B32520C1474+***	6400	5600	4000
		0.68	$6.0 \times 12.0 \times 10.3$	B32520C1684+***	5200	4400	3000
		1.0	$6.0 \times 12.0 \times 10.3$	B32520C1105+***	5200	4400	3000
250	160	0.068	$3.0 \times 8.0 \times 10.0$	B32520C3683+***	10400	9600	8000
		0.10	$4.0 \times 8.5 \times 10.0$	B32520C3104+***	8000	7200	6000
		0.15	$5.0 \times 10.5 \times 10.0$	B32520C3154+***	6400	5600	4000
		0.22	$6.0 \times 12.0 \times 10.3$	B32520C3224+***	5200	4400	3000
400	200	0.015	$3.0 \times 8.0 \times 10.0$	B32520E6153+***	10400	9600	8000
		0.022	$3.0 \times 8.0 \times 10.0$	B32520E6223+***	10400	9600	8000
		0.033	$4.0 \times 8.5 \times 10.0$	B32520E6333+***	8000	7200	6000
		0.047	$4.0 \times 8.5 \times 10.0$	B32520E6473+***	8000	7200	6000
		0.068	$5.0 \times 10.5 \times 10.0$	B32520E6683+***	6400	5600	4000
		0.10	$5.0 \times 10.5 \times 10.0$	B32520E6104+***	6400	5600	4000
		0.15	$6.0 \times 12.0 \times 10.3$	B32520E6154+***	5200	4400	3000

MOQ = Minimum Order Quantity, consisting of 4 packing units.  
Further E series and intermediate capacitance values on request.

**Composition of ordering code**

+ = Capacitance tolerance code:

M =  $\pm 20\%$

K =  $\pm 10\%$

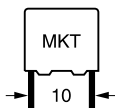
J =  $\pm 5\%$

\*\*\* = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (standard lead length 6 – 1 mm)


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

$V_R$	$V_{RMS}$ $f \leq 60$ Hz	$C_R$	Max. dimensions $w \times h \times l$	Ordering code (composition see below)	Ammo pack	Reel pcs./ MOQ	Untaped pcs./ MOQ
V DC	V AC	$\mu F$	mm		pcs./MOQ	MOQ	MOQ
63	40	0.47	4.0 × 7.0 × 13.0	B32521C0474+***	4000	6800	4000
		0.68	4.0 × 7.0 × 13.0	B32521C0684+***	4000	6800	4000
		1.0	4.0 × 9.0 × 13.0	B32521C0105+***	4000	6800	4000
		1.5	5.0 × 11.0 × 13.0	B32521C0155+***	3320	5200	4000
		2.2	5.0 × 11.0 × 13.0	B32521C0225+***	3320	5200	4000
		3.3	6.0 × 12.0 × 13.0	B32521C0335+***	2720	4400	4000
100	63	0.047	4.0 × 7.0 × 13.0	B32521C1473+***	4000	6800	4000
		0.068	4.0 × 7.0 × 13.0	B32521C1683+***	4000	6800	4000
		0.10	4.0 × 7.0 × 13.0	B32521C1104+***	4000	6800	4000
		0.15	4.0 × 7.0 × 13.0	B32521C1154+***	4000	6800	4000
		0.22	4.0 × 7.0 × 13.0	B32521C1224+***	4000	6800	4000
		0.33	4.0 × 7.0 × 13.0	B32521C1334+***	4000	6800	4000
		0.47	4.0 × 9.0 × 13.0	B32521C1474+***	4000	6800	4000
		0.68	5.0 × 11.0 × 13.0	B32521C1684+***	3320	5200	4000
		1.0	6.0 × 12.0 × 13.0	B32521C1105+***	2720	4400	4000
250	160	0.010	4.0 × 7.0 × 13.0	B32521C3103+***	4000	6800	4000
		0.015	4.0 × 7.0 × 13.0	B32521C3153+***	4000	6800	4000
		0.022	4.0 × 7.0 × 13.0	B32521C3223+***	4000	6800	4000
		0.033	4.0 × 7.0 × 13.0	B32521C3333+***	4000	6800	4000
		0.047	4.0 × 7.0 × 13.0	B32521C3473+***	4000	6800	4000
		0.056	4.0 × 7.0 × 13.0	B32521C3563+***	4000	6800	4000
		0.068	4.0 × 7.0 × 13.0	B32521C3683+***	4000	6800	4000
		0.082	4.0 × 7.0 × 13.0	B32521C3823+***	4000	6800	4000
		0.10	4.0 × 7.0 × 13.0	B32521C3104+***	4000	6800	4000
		0.12	4.0 × 9.0 × 13.0	B32521C3124+***	4000	6800	4000
		0.15	4.0 × 9.0 × 13.0	B32521C3154+***	4000	6800	4000
		0.18	5.0 × 11.0 × 13.0	B32521C3184+***	3320	5200	4000
		0.22	5.0 × 11.0 × 13.0	B32521C3224+***	3320	5200	4000
		0.33	5.0 × 11.0 × 13.0	B32521C3334+***	3320	5200	4000
		0.47	6.0 × 12.0 × 13.0	B32521C3474+***	2720	4400	4000

MOQ = Minimum Order Quantity, consisting of 4 packing units.  
Further E series and intermediate capacitance values on request.

**Composition of ordering code**

+ = Capacitance tolerance code:

M = ±20%

K = ±10%

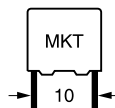
J = ±5%

\*\*\* = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (standard lead length 6 – 1 mm)


**Ordering codes and packing units (lead spacing 10 mm)**

$V_R$	$V_{RMS}$ $f \leq 60$ Hz	$C_R$	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./MOQ	Reel pcs./ MOQ	Untaped pcs./ MOQ
V DC	V AC	$\mu F$					
400	200	0.010	$4.0 \times 7.0 \times 13.0$	B32521E6103+***	4000	6800	4000
		0.015	$4.0 \times 7.0 \times 13.0$	B32521E6153+***	4000	6800	4000
		0.022	$4.0 \times 7.0 \times 13.0$	B32521E6223+***	4000	6800	4000
		0.033	$4.0 \times 7.0 \times 13.0$	B32521E6333+***	4000	6800	4000
		0.047	$4.0 \times 9.0 \times 13.0$	B32521E6473+***	4000	6800	4000
		0.068	$4.0 \times 9.0 \times 13.0$	B32521E6683+***	4000	6800	4000
		0.10	$5.0 \times 11.0 \times 13.0$	B32521E6104+***	3320	5200	4000
		0.15	$6.0 \times 12.0 \times 13.0$	B32521E6154+***	2720	4400	4000
630	200	0.010	$4.0 \times 9.0 \times 13.0$	B32521D8103+***	—	6800	4000
		0.015	$5.0 \times 11.0 \times 13.0$	B32521D8153+***	—	6800	4000
		0.022	$5.0 \times 11.0 \times 13.0$	B32521D8223+***	—	5200	4000
		0.033	$6.0 \times 12.0 \times 13.0$	B32521D8333+***	—	5200	4000

MOQ = Minimum Order Quantity, consisting of 4 packing units.  
Further E series and intermediate capacitance values on request.

**Composition of ordering code**

+ = Capacitance tolerance code:

M =  $\pm 20\%$

K =  $\pm 10\%$

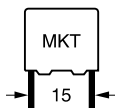
J =  $\pm 5\%$

\*\*\* = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (standard lead length 6 – 1 mm)


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

$V_R$	$V_{RMS}$ $f \leq 60$ Hz	$C_R$	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./MOQ	Reel pcs./ MOQ	Untaped pcs./ MOQ
V DC	V AC	$\mu F$					
63	40	0.68	5.0 × 10.5 × 18.0	B32522C0684+***	4680	5200	4000
		1.0	5.0 × 10.5 × 18.0	B32522C0105+***	4680	5200	4000
		1.5	5.0 × 10.5 × 18.0	B32522C0155+***	4680	5200	4000
		2.2	5.0 × 10.5 × 18.0	B32522C0225+***	4680	5200	4000
		3.3	6.0 × 11.0 × 18.0	B32522C0335+***	3840	4400	4000
		4.7	7.0 × 12.5 × 18.0	B32522C0475+***	3320	3600	4000
		6.8	8.5 × 14.5 × 18.0	B32522C0685+***	2720	2800	2000
		10	9.0 × 17.5 × 18.0	B32522C0106+***	2560	2800	2000
100	63	0.33	5.0 × 10.5 × 18.0	B32522C1334+***	4680	5200	4000
		0.47	5.0 × 10.5 × 18.0	B32522C1474+***	4680	5200	4000
		0.68	5.0 × 10.5 × 18.0	B32522C1684+***	4680	5200	4000
		1.0	5.0 × 10.5 × 18.0	B32522C1105+***	4680	5200	4000
		1.0	∇ 6.0 × 11.0 × 18.0	B32522Q1105+***	3840	4400	4000
		1.5	6.0 × 11.0 × 18.0	B32522C1155+***	3840	4400	4000
		1.5	∇ 7.0 × 12.5 × 18.0	B32522Q1155+***	3320	3600	4000
		2.2	7.0 × 12.5 × 18.0	B32522C1225+***	3320	3600	4000
		2.2	∇ 8.5 × 14.5 × 18.0	B32522Q1225+***	2720	2800	2000
		3.3	8.5 × 14.5 × 18.0	B32522C1335+***	2720	2800	2000
		3.3	∇ 9.0 × 17.5 × 18.0	B32522Q1335+***	2560	2800	2000
		4.7	9.0 × 17.5 × 18.0	B32522C1475+***	2560	2800	2000
		4.7	∇ 11.0 × 18.5 × 18.0	B32522Q1475+***	–	2200	1200
6.8	11.0 × 18.5 × 18.0	B32522C1685+***	–	–	1200		
250	160	0.10	5.0 × 10.5 × 18.0	B32522C3104+***	4680	5200	4000
		0.15	5.0 × 10.5 × 18.0	B32522C3154+***	4680	5200	4000
		0.22	5.0 × 10.5 × 18.0	B32522C3224+***	4680	5200	4000
		0.33	5.0 × 10.5 × 18.0	B32522C3334+***	4680	5200	4000
		0.39	5.0 × 10.5 × 18.0	B32522C3394+***	4680	5200	4000
		0.47	6.0 × 11.0 × 18.0	B32522C3474+***	3840	4400	4000
		0.56	7.0 × 12.5 × 18.0	B32522C3564+***	3320	3600	4000

∇ Wound capacitor technology

MOQ = Minimum Order Quantity, consisting of 4 packing units.  
Further E series and intermediate capacitance values on request.

**Composition of ordering code**

+ = Capacitance tolerance code:

M = ±20%

K = ±10%

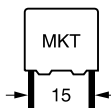
J = ±5%

\*\*\* = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (standard lead length 6 – 1 mm)


**Ordering codes and packing units (lead spacing 15 mm)**

$V_R$	$V_{RMS}$ $f \leq 60$ Hz	$C_R$	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./MOQ	Reel pcs./ MOQ	Untaped pcs./ MOQ
V DC	V AC	$\mu F$					
250	160	0.68	7.0 × 12.5 × 18.0	B32522C3684+***	3320	3600	4000
		1.0	8.5 × 14.5 × 18.0	B32522C3105+***	2720	2800	2000
		1.0 ▽	8.5 × 14.5 × 18.0	B32522N3105+***	2720	2800	2000
		1.5	9.0 × 17.5 × 18.0	B32522C3155+***	2560	2800	2000
		1.5 ▽	9.0 × 17.5 × 18.0	B32522N3155+***	2560	2800	2000
		2.2	11.0 × 18.5 × 18.0	B32522C3225+***	—	—	1200
400	200	0.047	5.0 × 10.5 × 18.0	B32522E6473+***	4680	5200	4000
		0.068	5.0 × 10.5 × 18.0	B32522E6683+***	4680	5200	4000
		0.10	5.0 × 10.5 × 18.0	B32522E6104+***	4680	5200	4000
		0.15	5.0 × 10.5 × 18.0	B32522E6154+***	4680	5200	4000
		0.22	6.0 × 11.0 × 18.0	B32522E6224+***	3840	4400	4000
		0.33	7.0 × 12.5 × 18.0	B32522E6334+***	3320	3600	4000
		0.39	9.0 × 17.5 × 18.0	B32522E6394+***	2560	2800	2000
		0.47	9.0 × 17.5 × 18.0	B32522E6474+***	2560	2800	2000
		0.56	9.0 × 17.5 × 18.0	B32522E6564+***	2560	2800	2000
		0.68	9.0 × 17.5 × 18.0	B32522E6684+***	2560	2800	2000
		1.0	11.0 × 18.5 × 18.0	B32522E6105+***	—	—	1200
450	200	0.10 ▽	5.0 × 10.5 × 18.0	B32522N6104+***	4680	5200	4000
		0.15 ▽	5.0 × 10.5 × 18.0	B32522N6154+***	4680	5200	4000
		0.22 ▽	6.0 × 11.0 × 18.0	B32522N6224+***	3840	4400	4000
		0.33 ▽	7.0 × 12.5 × 18.0	B32522N6334+***	3320	3600	4000
		0.47 ▽	8.5 × 14.5 × 18.0	B32522N6474+***	2720	2800	2000
		0.68 ▽	9.0 × 17.5 × 18.0	B32522N6684+***	2560	2800	2000
		1.0 ▽	11.0 × 18.5 × 18.0	B32522N6105+***	—	2200	1200
630	200	0.047	5.0 × 10.5 × 18.0	B32522D8473+***	—	5200	4000
		0.068	6.0 × 11.0 × 18.0	B32522D8683+***	—	4400	4000
		0.10	7.0 × 12.5 × 18.0	B32522D8104+***	—	3600	4000
		0.15	8.5 × 14.5 × 18.0	B32522D8154+***	—	2800	2000
		0.22	9.0 × 17.5 × 18.0	B32522D8224+***	—	2800	2000

▽ Wound capacitor technology

MOQ = Minimum Order Quantity, consisting of 4 packing units.  
Further E series and intermediate capacitance values on request.

**Composition of ordering code**

+ = Capacitance tolerance code:

M = ±20%

K = ±10%

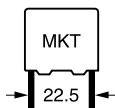
J = ±5%

\*\*\* = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (standard lead length 6 – 1 mm)


**B32523**
**General purpose (wound)**
**Ordering codes and packing units (lead spacing 22.5 mm)**

$V_R$	$V_{RMS}$ $f \leq 60$ Hz	$C_R$	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./MOQ	Reel pcs./MOQ	Untaped pcs./MOQ
V DC	V AC	$\mu F$					
63	40	3.3	$6.0 \times 15.0 \times 26.5$	B32523R0335+***	2720	2800	2880
		4.7	$6.0 \times 15.0 \times 26.5$	B32523R0475+***	2720	2800	2880
		6.8	$6.0 \times 15.0 \times 26.5$	B32523R0685+***	2720	2800	2880
		10	$7.0 \times 16.0 \times 26.5$	B32523R0106+***	2320	2400	2520
		15	$10.5 \times 16.5 \times 26.5$	B32523R0156+***	1560	1600	2160
		22	$12.0 \times 22.0 \times 26.5$	B32523R0226+***	–	–	1800
100	63	1.5	$6.0 \times 15.0 \times 26.5$	B32523Q1155+***	2720	2800	2880
		2.2	$6.0 \times 15.0 \times 26.5$	B32523Q1225+***	2720	2800	2880
		3.3	$6.0 \times 15.0 \times 26.5$	B32523Q1335+***	2720	2800	2880
		4.7	$7.0 \times 16.0 \times 26.5$	B32523Q1475+***	2320	2400	2520
		6.8	$8.5 \times 16.5 \times 26.5$	B32523Q1685+***	1960	2000	2040
		10	$10.5 \times 18.5 \times 26.5$	B32523Q1106+***	1560	1600	2160
250	160	15	$12.0 \times 22.0 \times 26.5$	B32523Q1156+***	–	–	1800
		0.47	$6.0 \times 15.0 \times 26.5$	B32523Q3474+***	2720	2800	2880
		0.68	$6.0 \times 15.0 \times 26.5$	B32523Q3684+***	2720	2800	2880
		1.0	$6.0 \times 15.0 \times 26.5$	B32523Q3105+***	2720	2800	2880
		1.5	$7.0 \times 16.0 \times 26.5$	B32523Q3155+***	2320	2400	2520
		2.2	$10.5 \times 16.5 \times 26.5$	B32523Q3225+***	1560	1600	2160
400	200	3.3	$11.0 \times 20.5 \times 26.5$	B32523Q3335+***	1480	1400	2040
		0.22	$6.0 \times 15.0 \times 26.5$	B32523Q6224+***	2720	2800	2880
		0.33	$6.0 \times 15.0 \times 26.5$	B32523Q6334+***	2720	2800	2880
		0.47	$7.0 \times 16.0 \times 26.5$	B32523Q6474+***	2320	2400	2520
		0.68	$8.5 \times 16.5 \times 26.5$	B32523Q6684+***	1920	2000	2040
		1.0	$10.5 \times 16.5 \times 26.5$	B32523Q6105+***	1560	1600	2160
630	200	1.5	$11.0 \times 20.5 \times 26.5$	B32523Q6155+***	1480	1400	2040
		0.10	$6.0 \times 15.0 \times 26.5$	B32523Q8104+***	2720	2800	2880
		0.15	$6.0 \times 15.0 \times 26.5$	B32523Q8154+***	2720	2800	2880
		0.22	$7.0 \times 16.0 \times 26.5$	B32523Q8224+***	2320	2400	2520
		0.33	$10.5 \times 16.5 \times 26.5$	B32523Q8334+***	1560	1600	2160
		0.47	$10.5 \times 20.5 \times 26.5$	B32523Q8474+***	1560	1600	2160
		0.68	$12.0 \times 22.0 \times 26.5$	B32523Q8684+***	–	–	1800

MOQ = Minimum Order Quantity, consisting of 4 packing units.  
Further E series and intermediate capacitance values on request.

**Composition of ordering code**

+ = Capacitance tolerance code:

M =  $\pm 20\%$

K =  $\pm 10\%$

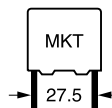
J =  $\pm 5\%$

\*\*\* = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (standard lead length 6 – 1 mm)


**Ordering codes and packing units (lead spacing 27.5 mm)**

$V_R$	$V_{RMS}$ $f \leq 60$ Hz	$C_R$	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./MOQ	Reel pcs./MOQ	Untaped pcs./MOQ
V DC	V AC	$\mu F$					
63	40	4.7	11.0 × 21.0 × 31.5	B32524R0475+***	–	1400	1280
		6.8	11.0 × 21.0 × 31.5	B32524Q0685+***	–	1400	1280
		10	11.0 × 21.0 × 31.5	B32524R0106+***	–	1400	1280
		15	11.0 × 21.0 × 31.5	B32524R0156+***	–	1400	1280
		22	11.0 × 21.0 × 31.5	B32524R0226+***	–	1400	1280
		33	12.5 × 21.5 × 31.5	B32524R0336+***	–	1200	1120
		47	18.0 × 27.5 × 31.5	B32524R0476+***	–	–	800
		68	18.0 × 27.5 × 31.5	B32524R0686+***	–	–	800
100	63	100	22.0 × 36.5 × 31.5	B32524R0107+***	–	–	640
		4.7	11.0 × 21.0 × 31.5	B32524Q1475+***	–	1400	1280
		6.8	11.0 × 21.0 × 31.5	B32524Q1685+***	–	1400	1280
		10	11.0 × 21.0 × 31.5	B32524Q1106+***	–	1400	1280
		15	11.0 × 21.0 × 31.5	B32524Q1156+***	–	1400	1280
		22	14.0 × 24.5 × 31.5	B32524Q1226+***	–	1000	1040
		33	18.0 × 27.5 × 31.5	B32524Q1336+***	–	–	800
		47	21.0 × 31.0 × 31.5	B32524Q1476+***	–	–	720
250	160	68	22.0 × 36.5 × 31.5	B32524Q1686+***	–	–	640
		1.5	11.0 × 21.0 × 31.5	B32524Q3155+***	–	1400	1280
		2.2	11.0 × 21.0 × 31.5	B32524Q3225+***	–	1400	1280
		3.3	11.0 × 21.0 × 31.5	B32524Q3335+***	–	1400	1280
		4.7	11.0 × 21.0 × 31.5	B32524Q3475+***	–	1400	1280
		6.8	11.0 × 21.0 × 31.5	B32524R3685+***	–	1400	1280
		10	12.5 × 21.5 × 31.5	B32524R3106+***	–	1200	1120
		15	15.0 × 24.5 × 31.5	B32524R3156M***	–	–	960
		15	18.0 × 27.5 × 31.5	B32524R3156J***	–	–	960
		15	18.0 × 27.5 × 31.5	B32524R3156K***	–	–	960
		22	19.0 × 30.0 × 31.5	B32524R3226+***	–	–	720
		33	22.0 × 36.5 × 31.5	B32524R3336+***	–	–	640

MOQ = Minimum Order Quantity, consisting of 4 packing units.  
Further E series and intermediate capacitance values on request.

**Composition of ordering code**

+ = Capacitance tolerance code:

M = ±20%

K = ±10%

J = ±5%

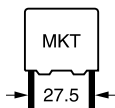
\*\*\* = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (standard lead length 6 – 1 mm)




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

$V_R$	$V_{RMS}$ $f \leq 60$ Hz	$C_R$	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./MOQ	Reel pcs./MOQ	Untaped pcs./MOQ
V DC	V AC	$\mu F$					
400	200	0.68	11.0 × 19.0 × 31.5	B32524Q6684+***	–	1400	1280
		1.0	11.0 × 19.0 × 31.5	B32524Q6105+***	–	1400	1280
		1.5	11.0 × 19.0 × 31.5	B32524Q6155+***	–	1400	1280
		2.2	11.0 × 21.0 × 31.5	B32524R6225+***	–	1400	1280
		3.3	14.0 × 24.5 × 31.5	B32524R6335+***	–	1000	1040
		4.7	14.0 × 24.5 × 31.5	B32524R6475+***	–	1000	1040
		6.8	18.0 × 27.5 × 31.5	B32524R6685+***	–	–	800
		10	22.0 × 36.5 × 31.5	B32524R6106+***	–	–	640
630	220	0.33	11.0 × 21.0 × 31.5	B32524Q8334+***	–	1400	1280
		0.47	11.0 × 21.0 × 31.5	B32524Q8474+***	–	1400	1280
		0.68	11.0 × 21.0 × 31.5	B32524Q8684+***	–	1400	1280
		1.0	14.0 × 24.5 × 31.5	B32524Q8105+***	–	1000	1040
		1.5	18.0 × 27.5 × 31.5	B32524Q8155+***	–	–	800
		2.2	21.0 × 31.0 × 31.5	B32524Q8225+***	–	–	720

MOQ = Minimum Order Quantity, consisting of 4 packing units.

Further E series and intermediate capacitance values on request.

**Composition of ordering code**

+ = Capacitance tolerance code:

 M =  $\pm 20\%$ 

 K =  $\pm 10\%$ 

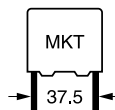
 J =  $\pm 5\%$ 

\*\*\* = Packaging code:

289 = Ammo pack

189 = Reel

000 = Untaped (standard lead length 6 – 1 mm)


**Ordering codes and packing units (lead spacing 37.5 mm)**

$V_R$	$V_{RMS}$ $f \leq 60$ Hz	$C_R$	Max. dimensions $w \times h \times l$ mm	Ordering code (composition see below)	Ammo pack pcs./MOQ	Reel pcs./MOQ	Untaped pcs./MOQ
V DC	V AC	$\mu F$					
63	40	22	12.0 × 22.0 × 41.5	B32526R0226+***	—	—	1620
		33	12.0 × 22.0 × 41.5	B32526R0336+***	—	—	1620
		47	12.0 × 22.0 × 41.5	B32526R0476+***	—	—	1620
		56	24.0 × 15.0 × 41.5	B32526T0566+***	—	—	1040
		68	16.0 × 28.5 × 41.5	B32526R0686+***	—	—	800
		82	24.0 × 19.0 × 41.5	B32526T0826+***	—	—	780
		100	18.0 × 32.5 × 41.5	B32526R0107+***	—	—	720
		150	20.0 × 39.5 × 41.5	B32526R0157+***	—	—	640
		220	28.0 × 42.5 × 41.5	B32526R0227A***	—	—	440
100	63	15	12.0 × 22.0 × 41.5	B32526R1156+***	—	—	1620
		22	12.0 × 22.0 × 41.5	B32526R1226+***	—	—	1620
		33	14.0 × 25.0 × 41.5	B32526R1336+***	—	—	1380
		33	24.0 × 15.0 × 41.5	B32526T1336+***	—	—	1040
		47	16.0 × 28.5 × 41.5	B32526R1476+***	—	—	800
		47	24.0 × 19.0 × 41.5	B32526T1476+***	—	—	780
		68	18.0 × 32.5 × 41.5	B32526R1686+***	—	—	720
		100	20.0 × 39.5 × 41.5	B32526R1107+***	—	—	640
		150	28.0 × 42.5 × 41.5	B32526R1157+***	—	—	440
250	160	4.7	12.0 × 22.0 × 41.5	B32526R3475+***	—	—	1620
		6.8	12.0 × 22.0 × 41.5	B32526R3685+***	—	—	1620
		10	12.0 × 22.0 × 41.5	B32526R3106+***	—	—	1620
		15	14.0 × 25.0 × 41.5	B32526R3156+***	—	—	1380
		15	24.0 × 15.0 × 41.5	B32526T3156+***	—	—	1040
		22	16.0 × 28.5 × 41.5	B32526R3226+***	—	—	800
		22	24.0 × 19.0 × 41.5	B32526T3226+***	—	—	780
		33	20.0 × 39.5 × 41.5	B32526R3336+***	—	—	640
		47	20.0 × 39.5 × 41.5	B32526R3476+***	—	—	640
		68	28.0 × 42.5 × 41.5	B32526R3686+***	—	—	440

MOQ = Minimum Order Quantity, consisting of 4 packing units.  
Further E series and intermediate capacitance values on request.

**Composition of ordering code**

+ = Capacitance tolerance code:

M =  $\pm 20\%$

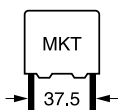
K =  $\pm 10\%$

J =  $\pm 5\%$

A = -15 ... +5% (220  $\mu F$  type only)

\*\*\* = Packaging code:

000 = Untaped (standard lead length 6 -1 mm)


**B32526**
**General purpose (wound)**
**Ordering codes and packing units (lead spacing 37.5 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./MOQ	Reel pcs./MOQ	Untaped pcs./MOQ
V DC	V AC	$\mu\text{F}$					
400	200	3.3	12.0 × 22.0 × 41.5	B32526R6335+***	—	—	1620
		4.7	12.0 × 22.0 × 41.5	B32526R6475+***	—	—	1620
		5.6	24.0 × 15.0 × 41.5	B32526T6565+***	—	—	1040
		6.8	14.0 × 25.0 × 41.5	B32526R6685+***	—	—	1380
		8.2	24.0 × 19.0 × 41.5	B32526T6825+***	—	—	780
		10	18.0 × 32.5 × 41.5	B32526R6106+***	—	—	720
		15	20.0 × 39.5 × 41.5	B32526R6156+***	—	—	640
		22	28.0 × 42.5 × 41.5	B32526R6226+***	—	—	440

MOQ = Minimum Order Quantity, consisting of 4 packing units.  
Further E series and intermediate capacitance values on request.

**Composition of ordering code**

+ = Capacitance tolerance code:

M = ±20%

K = ±10%

J = ±5%

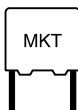
 A = -15 ... +5% (220  $\mu\text{F}$  type only)

\*\*\* = Packaging code:

000 = Untaped (standard lead length 6 – 1 mm)

**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)	$V_R$	$C_R \leq 0.33 \mu F$		$C_R > 0.33 \mu F$
	$\leq 100$ V DC	3750 M $\Omega$		1250 s
	$\geq 250$ V DC	7500 M $\Omega$		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
	$T_A \leq 85$ $85 < T_A \leq 125$	$V_C = V_R$ $V_C = V_R \cdot (165 - T_A) / 80$		$V_{C,RMS} = V_{RMS}$ $V_{C,RMS} = V_{RMS} \cdot (165 - T_A) / 80$
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)
	$T_A \leq 100$ $100 < T_A \leq 125$	$V_{op} = 1.25 \cdot V_C$ (2000 h) $V_{op} = 1.25 \cdot V_C$ (1000 h)		$V_{op} = 1.0 \cdot V_{C,RMS}$ (2000 h) $V_{op} = 1.0 \cdot V_{C,RMS}$ (1000 h)
Damp heat test Limit values after damp heat test	56 days/40 °C/93% relative humidity			
	Capacitance change $ \Delta C/C $		$\leq 5\%$	
	Dissipation factor change $\Delta \tan \delta$		$\leq 5 \cdot 10^{-3}$ (at 1 kHz)	
	Insulation resistance $R_{ins}$ or time constant $\tau = C_R \cdot R_{ins}$		$\geq 50\%$ of minimum as-delivered values	
Reliability: Failure rate $\lambda$ Service life $t_{SL}$	1 fit ( $\leq 1 \cdot 10^{-9}/h$ ) at 0.5 · $V_R$ , 40 °C 200 000 h at 1.0 · $V_R$ , 85 °C For conversion to other operating conditions and temperatures, refer to chapter "Quality, 2 Reliability".			
Failure criteria: Total failure Failure due to variation of parameters	Short circuit or open circuit			
	Capacitance change $ \Delta C/C $		$> 10\%$	
	Dissipation factor $\tan \delta$		$> 2 \cdot$ upper limit value	
	Insulation resistance $R_{ins}$ or time constant $\tau = C_R \cdot R_{ins}$		$< 150$ M $\Omega$ ( $C_R \leq 0.33 \mu F$ ) $< 50$ s ( $C_R > 0.33 \mu F$ )	



**B32520 ... B32529**

**General purpose (stacked/wound)**

### Pulse handling capability

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

"k<sub>0</sub>" represents the maximum permissible pulse characteristic of the waveform applied to the capacitor, expressed in V<sup>2</sup>/μs.

*Note:*

*The values of dV/dt and k<sub>0</sub> provided below must not be exceeded in order to avoid damaging the capacitor.*

### dV/dt values

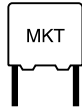
Lead spacing	5 mm	7.5 mm	10 mm		15 mm		22.5 mm	27.5 mm	37.5 mm	
Technology	S	S	S	W	S	W	W	W	W	
V <sub>R</sub> V DC	V <sub>RMS</sub> V AC	dV/dt in V/μs								
50	32	200	—	—	—	—	—	—	—	—
63	40	250	120	50	—	30	—	3	1	0.8
100	63	300	150	75	—	50	5	4	3	1
250	160	400	200	150	—	100	10	8	5	4
400	200	600	275	175	—	125	—	10	8.5	6
450	200	—	—	—	—	—	20	—	—	—
630	400	800	—	320	—	150	—	15	12	—

S = Stacked, W = Wound

### k<sub>0</sub> values

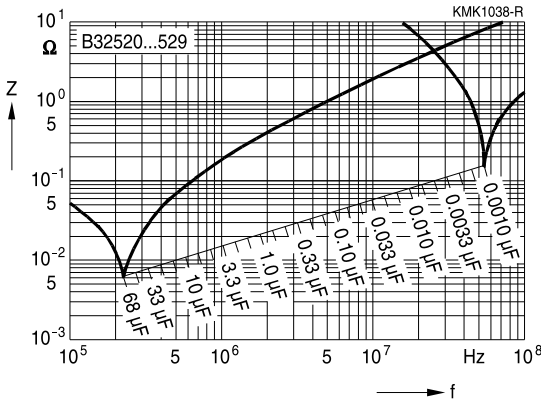
Lead spacing	5 mm	7.5 mm	10 mm		15 mm		22.5 mm	27.5 mm	37.5 mm	
Technology	S	S	S	W	S	W	W	W	W	
V <sub>R</sub> V DC	V <sub>RMS</sub> V AC	k <sub>0</sub> in V <sup>2</sup> /μs								
50	32	20000	—	—	—	—	—	—	—	—
63	40	30000	15000	6300	—	3800	—	375	130	100
100	63	60000	30000	15000	—	10000	850	800	600	200
250	160	200000	100000	75000	—	50000	5000	4000	2500	2000
400	200	500000	220000	140000	—	100000	—	10000	8500	6000
450	200	—	—	—	—	—	15000	—	—	—
630	400	1000000	—	400000	—	190000	—	18000	15000	—

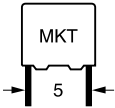
S = Stacked, W = Wound



**Impedance Z versus frequency f**

(typical values)





**B32529**

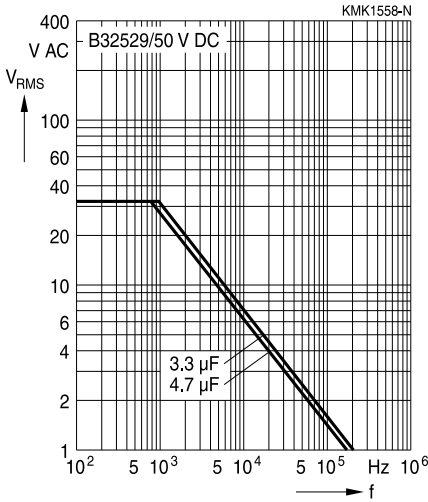
**General purpose (stacked)**

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

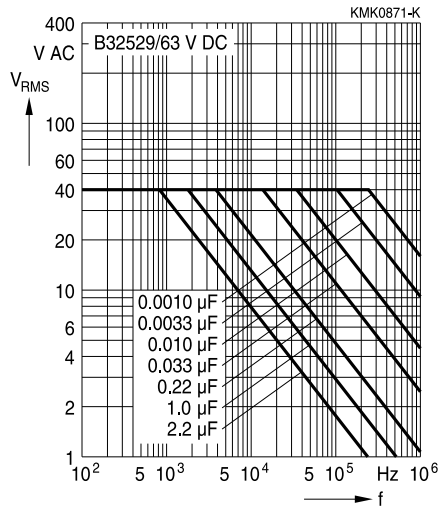
For  $T_A > 55^\circ C$ , please refer to "General technical information", section 3.2.3.

**Lead spacing 5 mm**

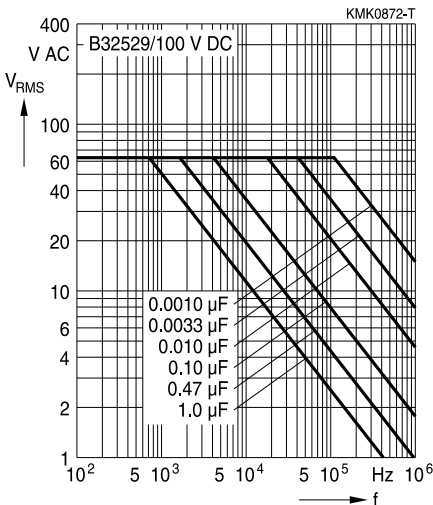
50 V DC/32 V AC



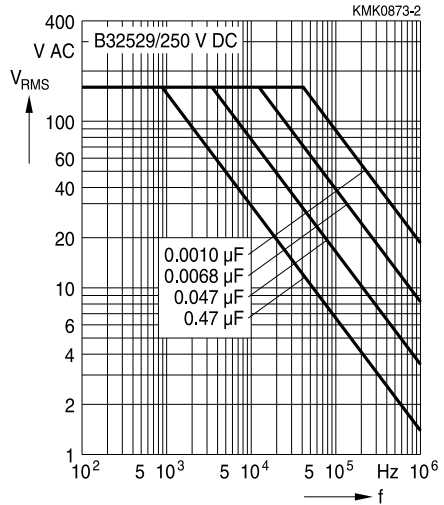
63 V DC/40 V AC

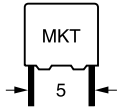


100 V DC/63 V AC



250 V DC/160 V AC



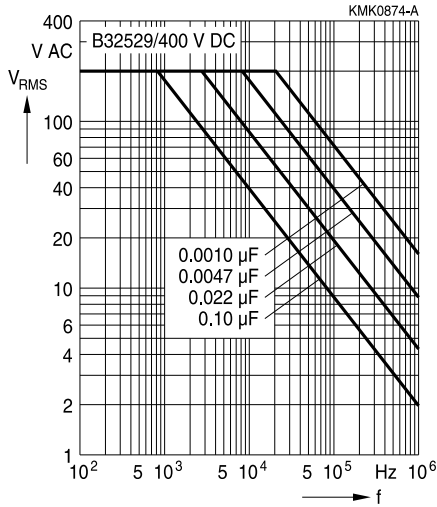


**Permissible AC voltage  $V_{RMS}$  versus frequency  $f$  (for sinusoidal waveforms,  $T_A \leq 55^\circ C$ )**

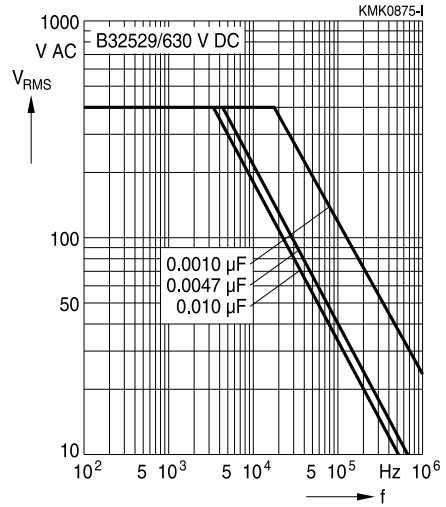
For  $T_A > 55^\circ C$ , please refer to "General technical information", section 3.2.3.

**Lead spacing 5 mm**

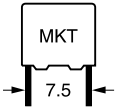
400 V DC/200 V AC



630 V DC/400 V AC







**B32520**

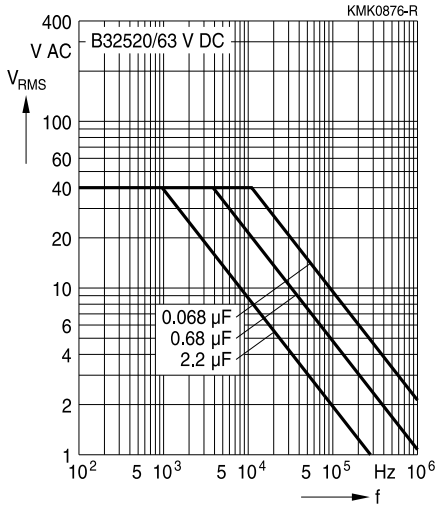
**General purpose (stacked)**

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

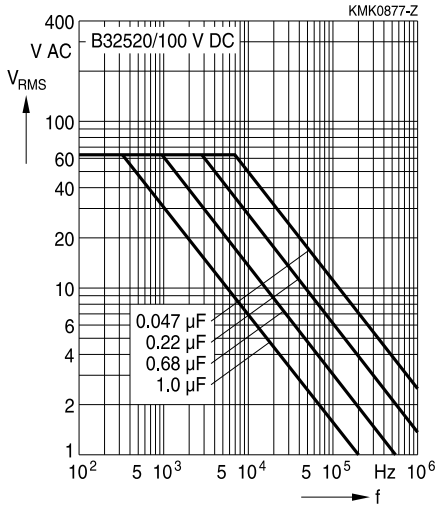
For  $T_A > 55^\circ C$ , please refer to "General technical information", section 3.2.3.

**Lead spacing 7.5 mm**

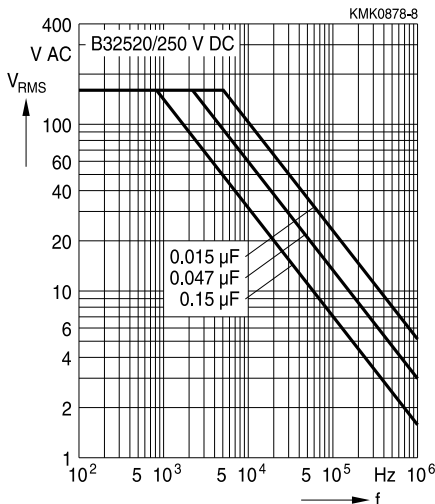
63 V DC/40 V AC



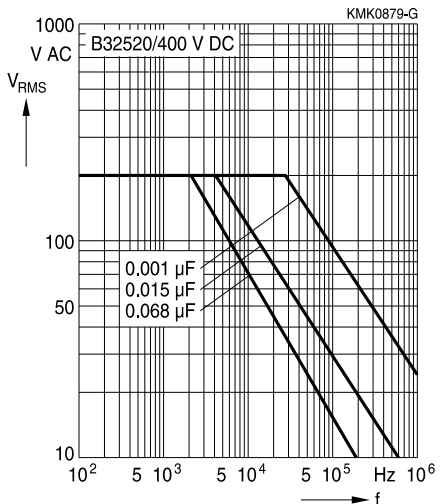
100 V DC/63 V AC



250 V DC/160 V AC

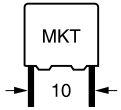


400 V DC/200 V AC



B32521

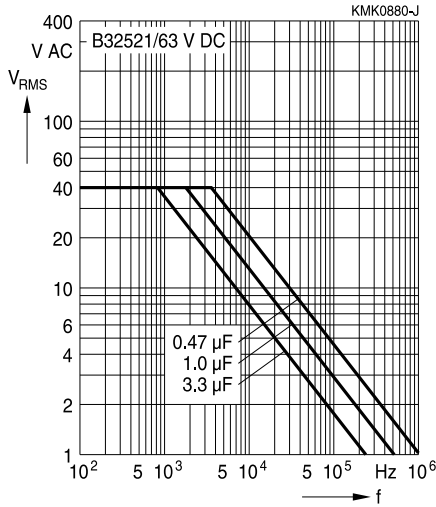
General purpose (stacked/wound)



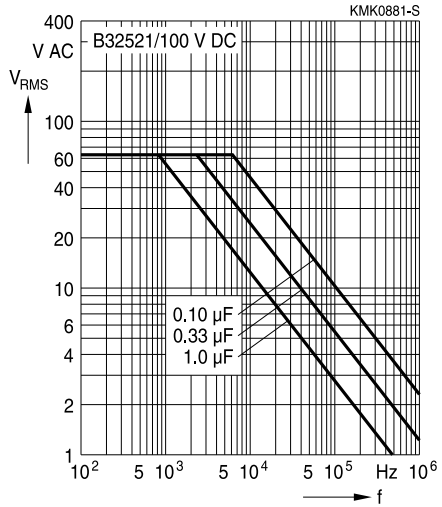
Permissible AC voltage  $V_{RMS}$  versus frequency  $f$  (for sinusoidal waveforms,  $T_A \leq 55^\circ C$ )  
 For  $T_A > 55^\circ C$ , please refer to "General technical information", section 3.2.3.

Lead spacing 10 mm

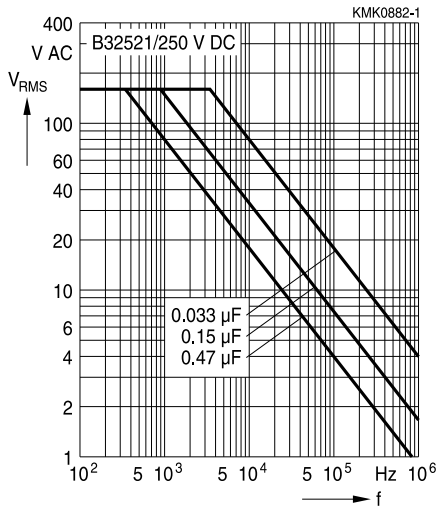
63 V DC/40 V AC



100 V DC/63 V AC



250 V DC/160 V AC



400 V DC/200 V AC

