Film Capacitors

Metallized Polyester Film Capacitors (MKT)

Series/Type: **B32560 ... B32564**
Date: August 2004

Typical applications

- SMPS, converter
- Electronic ballasts
- Compact fluorescent lamps (CFL)

Climatic

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

Features

- Special dimensions available on request
- High pulse strength

Construction

- Dielectric: polyethylene terephthalate (polyester, PET)
- Stacked-film technology
- Uncoated

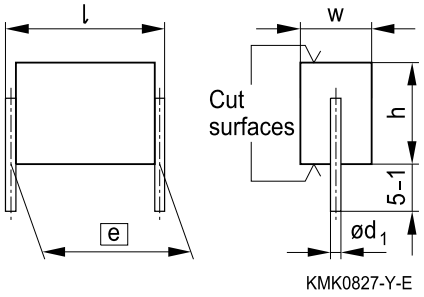
Terminals

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

Marking

Rated capacitance (coded),
rated DC voltage

Dimensional drawing



Dimensions in mm

Lead spacing e ±0.4	Lead diameter d_1	Type
7.5	0.5	B32560
10.0	0.5	B32561
15.0	0.6	B32562J
	0.8	B32562H
22.5	0.8	B32563
27.5	0.8	B32564

Delivery mode

Bulk (untaped)
Taped (Ammo pack or reel) for lead spacing ≤15.0 mm.
For notes on taping, refer to chapter "Taping and packing“.

Notes on mounting

When mounting these capacitors, take into account creepage distances and clearances to adjacent live parts. The insulating strength of the cut surfaces to other live parts of the circuit is 1.5 times the capacitors rated DC voltage, but is always at least 300 VDC.

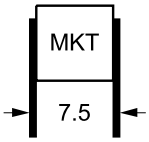
Capacitors with 7.5 mm lead spacing are only suitable for use with single-clad printed circuit boards.

Overview of available types

Lead spacing	7.5 mm						10.0 mm					15.0 mm			
Type	B32560						B32561					B32562			
Page	5						7					9			
V_R (VDC)	63	100	250	400	630	1000	63	100	250	400	630	100	250	400	630
V_{rms} (VAC)	40	63	160	200	400	500	40	63	160	200	350	63	160	200	350
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															
4.7															
6.8															
10															

Overview of available types

Lead spacing	22.5 mm			27.5 mm			
Type	B32563			B32564			
Page	10			11			
V_R (VDC)	100	250	400	100	250	400	420
V_{rms} (VAC)	63	160	200	63	160	200	200
C_R (µF)							
1.0							
1.5							
2.2							
3.3							
4.7							
6.8							
10							
15							
22							
33							



Ordering codes and packing units (lead spacing 7.5 mm)

V_R VDC	V_{rms} f ≤60 Hz VAC	C_R µF	Max. dimensions w × h × l mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
63	40	1.0	4.0 × 6.8 × 9.0	B32560J0105+***	2200	1800	1000
		1.5	5.1 × 7.6 × 9.0	B32560J0155+***	1700	1400	500
		2.2	6.5 × 8.2 × 9.0	B32560J0225+***	1500	1200	500
		3.3	8.5 × 9.1 × 9.0	B32560J0335+000	–	–	350
		4.7	9.8 × 11.0 × 9.0	B32560J0475+000	–	–	250
100	63	0.22	2.5 × 5.1 × 9.0	B32560J1224+***	3100	2500	1900
		0.33	2.7 × 5.7 × 9.0	B32560J1334+***	3000	2400	1500
		0.47	3.4 × 6.1 × 9.0	B32560J1474+***	2400	2000	1200
		0.68	4.2 × 6.5 × 9.0	B32560J1684+***	2000	1600	900
		1.0	5.5 × 7.0 × 9.0	B32560J1105+***	1500	1200	500
		1.5	6.7 × 8.2 × 9.0	B32560J1155+***	1250	1000	400
		2.2	8.5 × 9.2 × 9.0	B32560J1225+000	–	–	300
		3.3	9.5 × 11.0 × 9.0	B32560J1335+000	–	–	200
250	160	0.047	2.5 × 5.2 × 9.0	B32560J3473+***	3250	2600	1900
		0.068	2.6 × 5.7 × 9.0	B32560J3683+***	3100	2500	1700
		0.10	3.2 × 6.1 × 9.0	B32560J3104+***	3100	2000	1200
		0.15	3.9 × 7.0 × 9.0	B32560J3154+***	2050	1700	900
		0.22	4.9 × 7.5 × 9.0	B32560J3224+***	1700	1300	650
		0.33	6.4 × 8.2 × 9.0	B32560J3334+***	1300	1100	450
		0.47	7.4 × 9.8 × 9.0	B32560J3474+000	–	–	300
		0.68	9.5 × 11.0 × 9.0	B32560J3684+000	–	–	200

Further E series and intermediate capacitance values on request.

Special dimensions available on request.
For corresponding design rules, refer to chapter "General technical information", Section 1.3.2.

Composition of ordering code

+ = Capacitance tolerance code:
- M = ±20%
- K = ±10%
- J = ±5%

*** = Packaging code:
- 289 = Ammo pack
- 189 = Reel
- 000 = Untaped (lead length 5 −1 mm)

Ordering codes and packing units (lead spacing 7.5 mm)

V_R VDC	V_{rms} f ≤60 Hz VAC	C_R µF	Max. dimensions w × h × l mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
400	200	0.0010	2.5 × 5.5 × 9.0	B32560J6102+***	3500	2800	2300
		0.0015	2.5 × 5.5 × 9.0	B32560J6152+***	3250	2600	1800
		0.0022	2.5 × 5.5 × 9.0	B32560J6222+***	3350	2700	1800
		0.0033	2.5 × 5.5 × 9.0	B32560J6332+***	3100	2500	1700
		0.0047	2.5 × 5.5 × 9.0	B32560J6472+***	3400	2700	1900
		0.0068	2.5 × 5.5 × 9.0	B32560J6682+***	3500	2800	1900
		0.010	2.5 × 5.5 × 9.0	B32560J6103+***	3200	2600	1800
		0.015	2.5 × 5.5 × 9.0	B32560J6153+***	3250	2600	1800
		0.022	2.5 × 5.5 × 9.0	B32560J6223+***	3100	2500	1700
		0.033	2.6 × 6.0 × 9.0	B32560J6333+***	3100	2500	1600
		0.047	3.2 × 6.5 × 9.0	B32560J6473+***	2600	2100	1200
		0.068	3.8 × 7.3 × 9.0	B32560J6683+***	2150	1800	900
		0.10	4.9 × 7.7 × 9.0	B32560J6104+***	1700	1400	500
		0.15	6.5 × 8.2 × 9.0	B32560J6154+***	1350	1000	450
		0.22	7.7 × 9.8 × 9.0	B32560J6224+000	–	–	300
630	400	0.0010	2.5 × 5.5 × 9.0	B32560J8102+***	3700	3000	2300
		0.0015	2.5 × 5.5 × 9.0	B32560J8152+***	3250	2600	1800
		0.0022	2.5 × 5.5 × 9.0	B32560J8222+***	3350	2700	1800
		0.0033	2.5 × 5.5 × 9.0	B32560J8332+***	3500	2800	1900
		0.0047	2.5 × 5.5 × 9.0	B32560J8472+***	3400	2700	1800
		0.0068	3.2 × 6.5 × 9.0	B32560J8682+***	3750	2300	1300
		0.010	3.8 × 7.5 × 9.0	B32560J8103+***	3750	2300	1000
		0.015	4.6 × 8.3 × 9.0	B32560J8153+000	–	–	600
		0.022	5.7 × 8.6 × 9.0	B32560J8223+000	–	–	400
1000	500	0.0022	2.5 × 6.0 × 9.0	B32560J9222+***	3250	2600	1700
		0.0033	3.3 × 6.5 × 9.0	B32560J9332+***	2500	2000	1200
		0.0047	3.6 × 7.4 × 9.0	B32560J9472+***	2250	1900	900

Further E series and intermediate capacitance values on request.

Special dimensions available on request.
For corresponding design rules, refer to chapter "General technical information", Section 1.3.2 .

Composition of ordering code

+ = Capacitance tolerance code:
M = ±20%
K = ±10%
J = ±5%

*** = Packaging code:
289 = Ammo pack
189 = Reel
000 = Untaped (lead length 5 −1 mm)

Ordering codes and packing units (lead spacing 10 mm)

V_R VDC	V_{rms} f ≤60 Hz VAC	C_R µF	Max. dimensions w × h × l mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
63	40	1.0	3.5 × 6.2 × 11.0	B32561J0105+***	1240	1900	1000
		1.5	4.3 × 6.9 × 11.0	B32561J0155+***	1050	1500	700
		2.2	5.1 × 7.9 × 11.0	B32561J0225+***	850	1250	500
		3.3	6.4 × 9.1 × 11.0	B32561J0335+000	–	–	300
		4.7	7.3 × 11.0 × 11.0	B32561J0475+000	–	–	200
		6.8	8.8 × 12.7 × 11.0	B32561J0685+000	–	–	150
100	63	0.68	3.6 × 6.3 × 11.5	B32561J1684+***	1260	2000	1000
		1.0	4.5 × 6.9 × 11.5	B32561J1105+***	1050	1500	500
		1.5	5.6 × 7.8 × 11.5	B32561J1155+***	810	1200	500
		2.2	6.9 × 9.0 × 11.5	B32561J1225+000	–	–	350
		3.3	7.8 × 10.5 × 11.5	B32561J1335+000	–	–	200
250	160	0.10	2.8 × 5.3 × 11.5	B32561J3104+***	1540	2300	1300
		0.15	3.3 × 6.0 × 11.5	B32561J3154+***	1260	2000	1000
		0.22	4.2 × 6.6 × 11.5	B32561J3224+***	1040	1500	700
		0.33	5.2 × 7.5 × 11.5	B32561J3334+***	840	1300	500
		0.47	6.3 × 8.5 × 11.5	B32561J3474+***	680	1100	350
		0.68	7.5 × 9.7 × 11.5	B32561J3684+000	–	–	200
		1.0	9.5 × 11.0 × 11.5	B32561J3105+000	–	–	150
400	200	0.033	2.5 × 5.1 × 11.5	B32561J6333+***	1620	2300	1500
		0.047	2.6 × 6.0 × 11.5	B32561J6473+***	1560	2300	1300
		0.068	3.2 × 6.6 × 11.5	B32561J6683+***	1390	2100	1000
		0.10	4.0 × 6.9 × 11.5	B32561J6104+***	1090	1700	700
		0.15	5.2 × 7.7 × 11.5	B32561J6154+***	850	1300	500
		0.22	6.6 × 8.5 × 11.5	B32561J6224+***	680	1000	350
		0.33	8.0 × 9.5 × 11.5	B32561J6334+000	–	–	200
		0.47	9.8 × 11.0 × 11.5	B32561J6474+000	–	–	150

Further E series and intermediate capacitance values on request.

Special dimensions available on request.
For corresponding design rules, refer to chapter "General technical information", Section 1.3.2 .

Composition of ordering code

+ = Capacitance tolerance code:
- M = ±20%
- K = ±10%
- J = ±5%

*** = Packaging code:
- 289 = Ammo pack
- 189 = Reel
- 000 = Untaped (lead length 5 −1 mm)

Ordering codes and packing units (lead spacing 10 mm)

V_R VDC	V_{rms} f ≤60 Hz VAC	C_R µF	Max. dimensions w × h × l mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
630	350	0.010	2.6 × 4.9 × 11.0	B32561J8103+***	1710	2400	1700
		0.015	2.8 × 6.3 × 11.0	B32561J8153+***	1580	2300	1200
		0.022	3.4 × 6.9 × 11.0	B32561J8223+***	1300	2000	900
		0.033	4.2 × 7.6 × 11.0	B32561J8333+***	1020	1600	600
		0.047	5.3 × 8.0 × 11.0	B32561J8473+***	840	1250	450
		0.068	6.3 × 9.0 × 11.0	B32561J8683+000	–	–	350
		0.10	7.3 × 11.4 × 11.0	B32561J8104+000	–	–	200
		0.15	8.8 × 13.3 × 11.0	B32561J8154+000	–	–	150

Further E series and intermediate capacitance values on request.

Special dimensions available on request.
For corresponding design rules, refer to chapter "General technical information", Section 1.3.2 .

Composition of ordering code

+ = Capacitance tolerance code:
- M = ±20%
- K = ±10%
- J = ±5%

*** = Packaging code:
- 289 = Ammo pack
- 189 = Reel
- 000 = Untaped (lead length 5 −1 mm)

Ordering codes and packing units (lead spacing 15 mm)

V_R VDC	V_{rms} f ≤60 Hz VAC	C_R µF	Max. dimensions w × h × l mm	Ordering code (composition see below)	Ammo pack pcs./unit	Reel pcs./unit	Untaped pcs./unit
100	63	2.2	4.9 × 8.0 × 16.5	B32562J1225+***	1190	1300	800
		3.3	6.0 × 9.3 × 16.5	B32562J1335+***	960	1000	500
		4.7	7.3 × 10.6 × 16.5	B32562H1475+***	790	900	400
		6.8	9.0 × 11.8 × 16.5	B32562H1685+***	640	700	290
		10	11.8 × 13.0 × 16.5	B32562H1106+000	–	–	200
250	160	0.47	5.0 × 6.7 × 16.5	B32562J3474+***	1190	1300	950
		0.68	6.0 × 7.8 × 16.5	B32562J3684+***	960	1000	500
		1.0	7.0 × 9.3 × 16.5	B32562J3105+***	830	900	500
		1.5	8.7 × 11.0 × 16.5	B32562H3155+***	660	700	300
		2.2	10.7 × 12.8 × 16.5	B32562H3225+000	–	–	200
		3.3	13.9 × 14.5 × 16.5	B32562H3335+000	–	–	150
400	200	0.22	4.7 × 7.5 × 16.5	B32562J6224+***	1240	1300	850
		0.33	6.0 × 8.3 × 16.5	B32562J6334+***	960	1000	500
		0.47	7.3 × 9.3 × 16.5	B32562J6474+***	790	900	450
		0.68	8.9 × 10.8 × 16.5	B32562H6684+***	640	700	300
		1.0	10.9 × 12.5 × 16.5	B32562H6105+000	–	–	200
		1.5	13.7 × 15.2 × 16.5	B32562H6155+000	–	–	100
630	350	0.22	9.2 × 12.2 × 16.5	B32562H8224+000	–	–	350
		0.33	11.2 × 14.2 × 16.5	B32562H8334+000	–	–	250
		0.47	13.5 × 16.3 × 16.5	B32562H8474+000	–	–	180

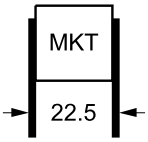
Further E series and intermediate capacitance values on request.

Special dimensions available on request.
For corresponding design rules, refer to chapter "General technical information", Section 1.3.2 .

Composition of ordering code

+ = Capacitance tolerance code:
M = ±20%
K = ±10%
J = ±5%

*** = Packaging code:
289 = Ammo pack
189 = Reel
000 = Untaped (lead length 5 −1 mm)



B32563

General purpose (stacked) SilverCap™

Ordering codes and packing units (lead spacing 22.5 mm)

V_R VDC	V_{rms} f ≤60 Hz VAC	C_R µF	Max. dimensions w × h × l mm	Ordering code (composition see below)	Untaped pcs./unit
100	63	6.8	7.0 × 10.5 × 24.0	B32563J1685+000	920
		10	8.6 × 12.2 × 24.0	B32563J1106+000	960
		15	10.9 × 14.0 × 24.0	B32563J1156+000	620
		22	12.8 × 17.2 × 24.0	B32563J1226+000	360
250	160	2.2	8.3 × 11.2 × 24.0	B32563J3225+000	740
		3.3	10.1 × 13.5 × 24.0	B32563J3335+000	700
		4.7	12.2 × 15.5 × 24.0	B32563J3475+000	390
400	200	1.0	8.3 × 11.2 × 24.0	B32563J6105+000	850
		1.5	10.3 × 13.2 × 24.0	B32563J6155+000	660
		2.2	12.6 × 15.5 × 24.0	B32563J6225+000	360

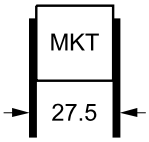
Further E series and intermediate capacitance values on request.

Special dimensions available on request.
For corresponding design rules, refer to chapter "General technical information", Section 1.3.2 .

Composition of ordering code

+ = Capacitance tolerance code:
M = ±20%
K = ±10%
J = ±5%

Packaging code:
000 = Untaped (lead length 5 − 1 mm)



Ordering codes and packing units (lead spacing 27.5 mm)

V_R VDC	V_{rms} f ≤60 Hz VAC	C_R µF	Max. dimensions w × h × l mm	Ordering code (composition see below)	Untaped pcs./unit
100	63	10	7.6 × 11.0 × 29.0	B32564J1106+000	680
		15	9.1 × 13.5 × 29.0	B32564J1156+000	430
		22	11.0 × 16.0 × 29.0	B32564J1226+000	320
		33	13.0 × 19.8 × 29.0	B32564J1336+000	360
250	160	3.3	7.9 × 14.0 × 29.0	B32564J3335+000	750
		4.7	9.6 × 15.8 × 29.0	B32564J3475+000	400
		6.8	11.9 × 18.0 × 29.0	B32564J3685+000	300
		10	13.8 × 22.5 × 29.0	B32564J3106+000	280
400	200	1.5	7.8 × 14.2 × 29.0	B32564J6155+000	750
		2.2	9.6 × 16.4 × 29.0	B32564J6225+000	400
		3.3	12.2 × 18.8 × 29.0	B32564J6335+000	330
		4.7	14.2 × 22.8 × 29.0	B32564J6475+000	260
420	200	4.7	16.0 × 20.0 × 29.0	B32564T6475K000	290
		6.8	16.0 × 20.0 × 29.0	B32564T6685K000	290

Further E series and intermediate capacitance values on request.

Special dimensions available on request.
For corresponding design rules, refer to chapter "General technical information", Section 1.3.2 .
The technical data given on the next pages do not apply to 420 V series. Please contact your nearest EPCOS representative if you need further information.

Composition of ordering code

+ = Capacitance tolerance code:
M = ±20%
K = ±10%
J = ±5%

Packaging code:
000 = Untaped (lead length 5 − 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 δ (in 10^{-3})	at	$C_R \leq 0.1$ µF	0.1 µF < $C_R \leq 1$ µF	$C_R > 1$ µF
at 20 °C	1 kHz	8	8	10
(upper limit values)	10 kHz	15	15	–
	100 kHz	30	–	–
Insulation resistance R_{ins}	V_R	$C_R \leq 0.33$ µF	$C_R > 0.33$ µF	
or time constant $\tau = C_R \cdot R_{ins}$	≤ 100 VDC	3750 MΩ	1250 s	
at 20 °C, rel. humidity ≤ 65%	≥ 250 VDC	7500 MΩ	2500 s	
(minimum as-delivered values)				
DC test voltage	1.4 · V_R, 2 s			
Category voltage V_C	T_A (°C)	DC voltage derating	AC voltage derating	
(continuous operation with V_{DC}	$T_A \leq 85$	$V_C = V_R$	$V_{C,rms} = V_{rms}$	
or V_{AC} at f ≤ 60 Hz)	$85 < T_A \leq 125$	$V_C = V_R \cdot (165 - T_A)/80$	$V_{C,rms} = V_{rms} \cdot (165 - T_A)/80$	
Operating voltage V_{op} for	T_A (°C)	DC voltage (max. hours)	AC voltage (max. hours)	
short operating periods	$T_A \leq 100$	$V_{op} = 1.25 \cdot V_C$ (2000 h)	$V_{op} = 1.0 \cdot V_{C,rms}$ (2000 h)	
(V_{DC} or V_{AC} at f ≤ 60 Hz)	$100 < T_A \leq 125$	$V_{op} = 1.25 \cdot V_C$ (1000 h)	$V_{op} = 1.0 \cdot V_{C,rms}$ (1000 h)	
Damp heat test	56 days[1]/40 °C/93% relative humidity			
Limit values after damp	Capacitance change |ΔC/C|	≤ 5%		
heat test	Dissipation factor change Δ tan δ	≤ 3 · 10^{-3} (at 1 kHz)		
		≤ 5 · 10^{-3} (at 10 kHz)		
	Insulation resistance R_{ins}	≥ 50% of minimum		
	or time constant $\tau = C_R \cdot R_{ins}$	as-delivered values		
Reliability:				
Failure rate λ	2 fit (≤ 2 · 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" .			
Failure criteria:				
Total failure	Short circuit or open circuit			
Failure due to variation	Capacitance change |ΔC/C|	> 10%		
of parameters	Dissipation factor tan δ	> 2 · upper limit value		
	Insulation resistance R_{ins}	< 150 MΩ ($C_R \leq 0.33$ µF)		
	or time constant $\tau = C_R \cdot R_{ins}$	< 50 s ($C_R > 0.33$ µF)		

1) Test criteria must be met after exposure to damp heat for 21 days

Pulse handling capability

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

"k_0" represents the maximum permissible pulse characteristic of the waveform applied to the capacitor, expressed in $V^2/\mu s$.

Note:
The values of dV/dt and k_0 provided below must not be exceeded in order to avoid damaging the capacitor.

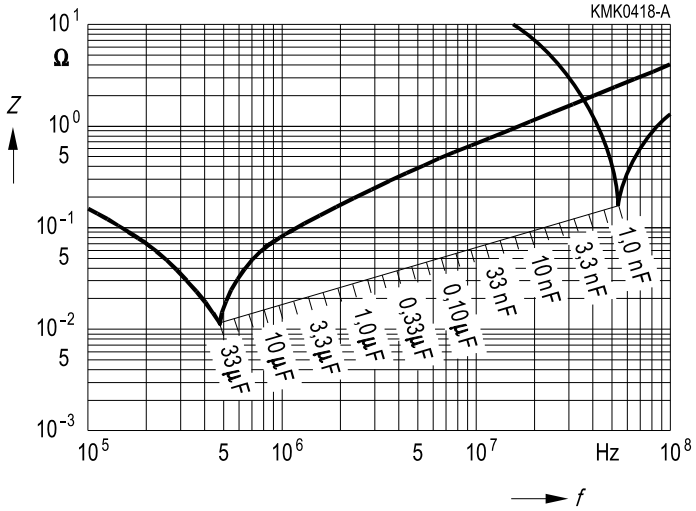
dV/dt values

Lead spacing		7.5 mm	10 mm	15 mm	22.5 mm	27.5 mm
V_R VDC	V_{rms} VAC	dV/dt in V/µs				
63	40	120	60	–	–	–
100	63	150	75	50	50	25
250	160	200	150	100	100	50
400	200	275	175	125	125	60
420	200	–	–	–	–	60
630	350	–	320	150	–	–
630	400	320	–	–	–	–
1000	500	360	–	–	–	–

k_0 values

Lead spacing		7.5 mm	10 mm	15 mm	22.5 mm	27.5 mm
V_R VDC	V_{rms} VAC	k_0 in $V^2/\mu s$				
63	40	15 000	7500	–	–	–
100	63	30 000	15 000	10 000	10 000	5 000
250	160	100 000	75 000	50 000	50 000	25 000
400	200	220 000	140 000	100 000	100 000	50 000
420	200	–	–	–	–	50 000
630	350	–	400 000	190 000	–	–
630	400	400 000	–	–	–	–
1000	500	720 000	–	–	–	–

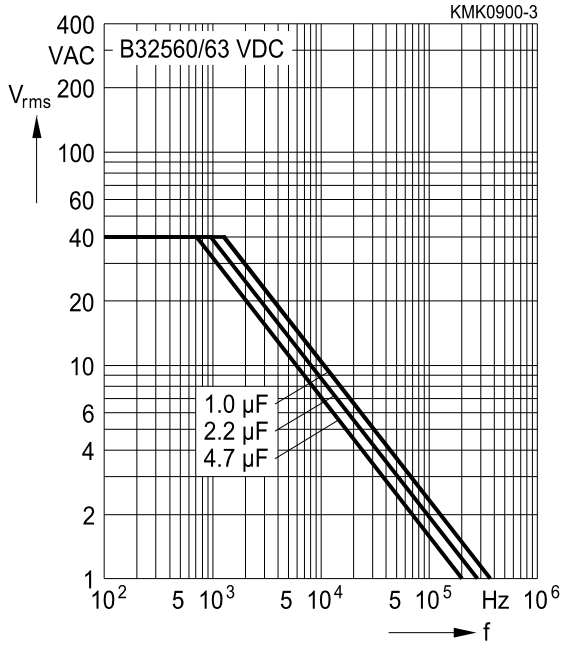
Impedance Z versus frequency f
(typical values)



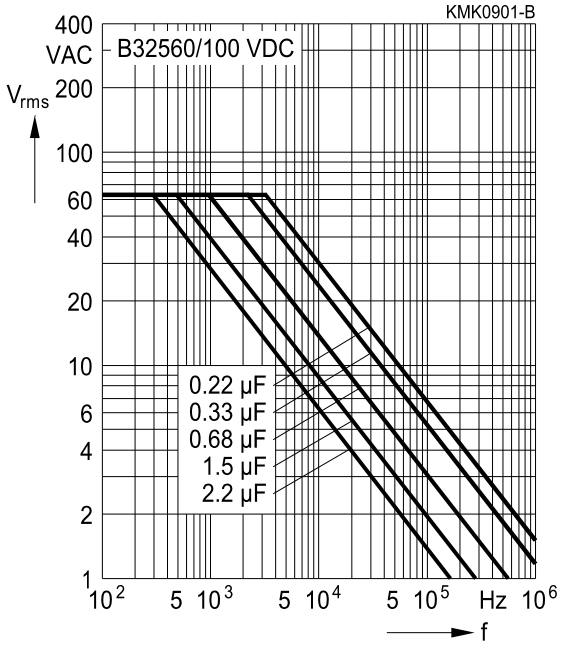
Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55$ °C)
For T_A >55 °C, please refer to "General technical information", section 3.2.3.

Lead spacing 7.5 mm

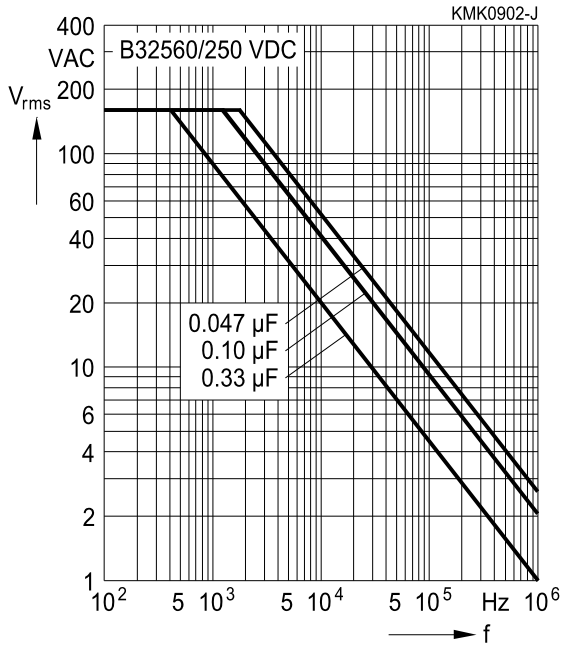
63 VDC/40 VAC



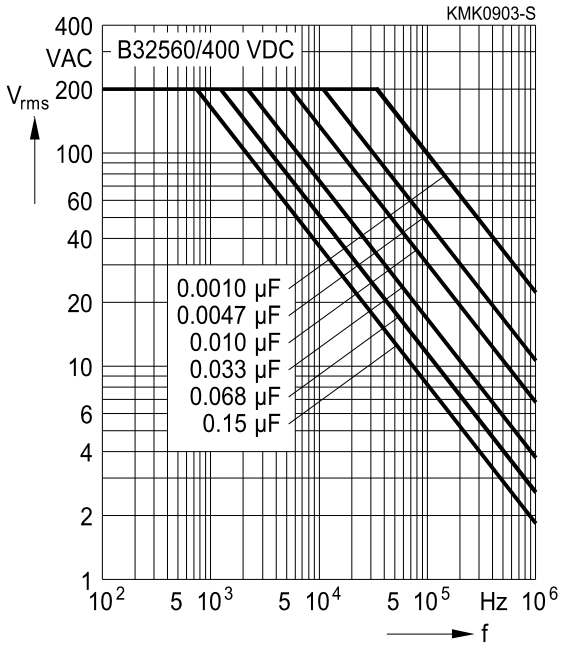
100 VDC/63 VAC



250 VDC/160 VAC



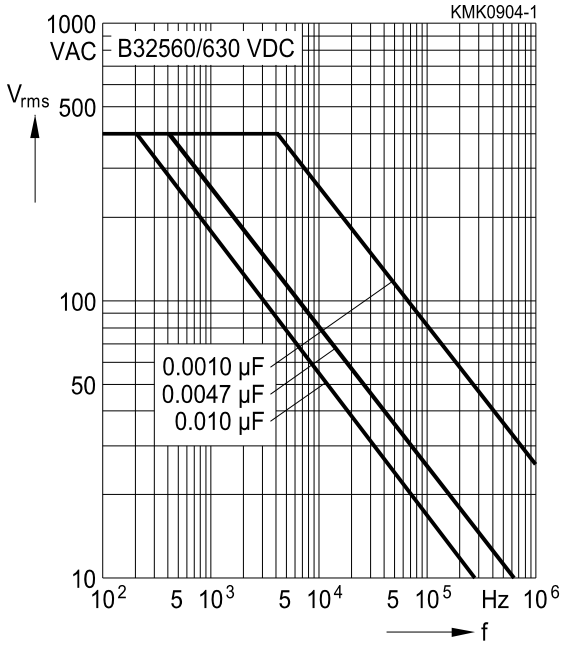
400 VDC/200 VAC



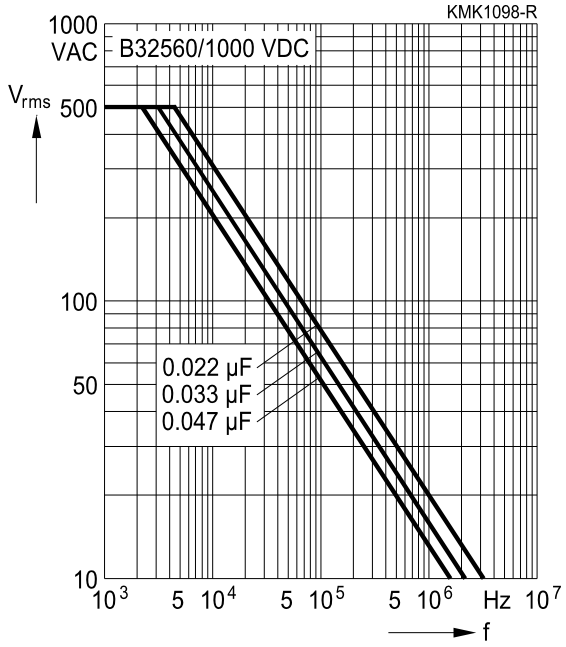
Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55$ °C)
For T_A >55 °C, please refer to "General technical information", section 3.2.3.

Lead spacing 7.5 mm

630 VDC/400 VAC



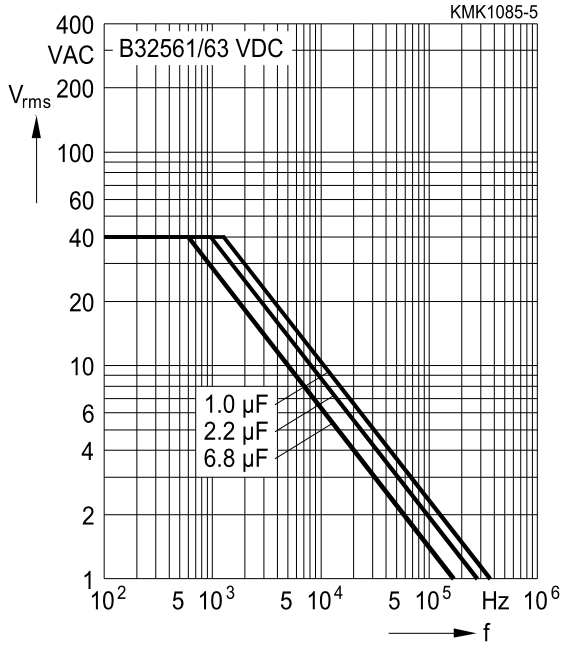
1000 VDC/500 VAC



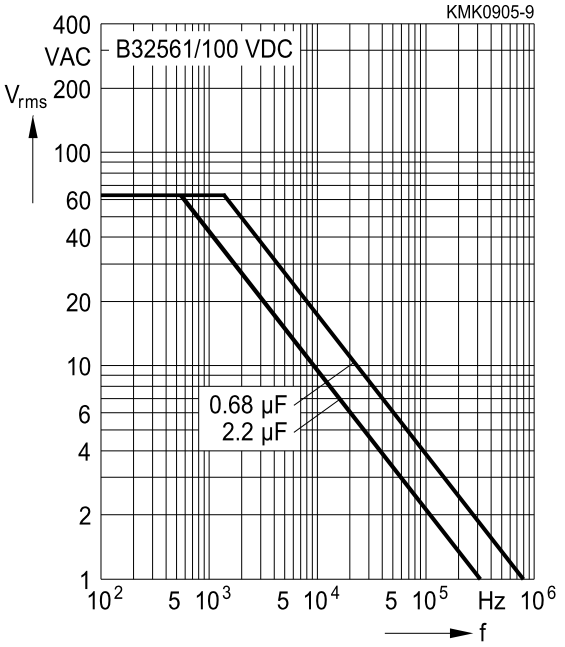
Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55$ °C)
For T_A >55 °C, please refer to "General technical information", section 3.2.3.

Lead spacing 10 mm

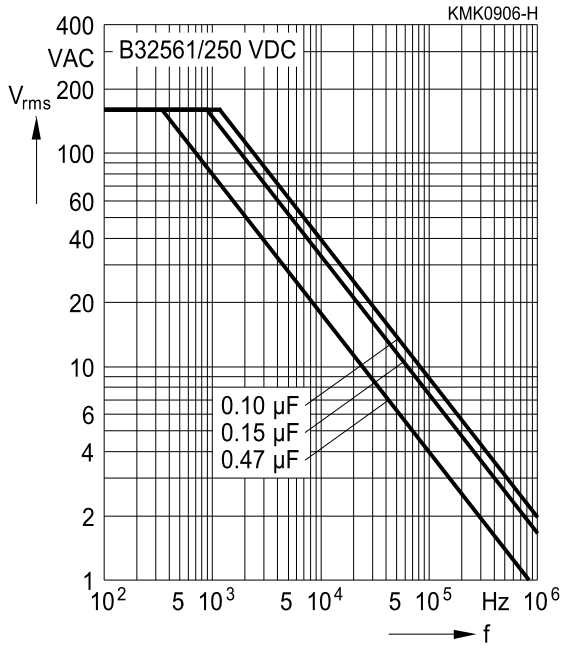
63 VDC/40 VAC



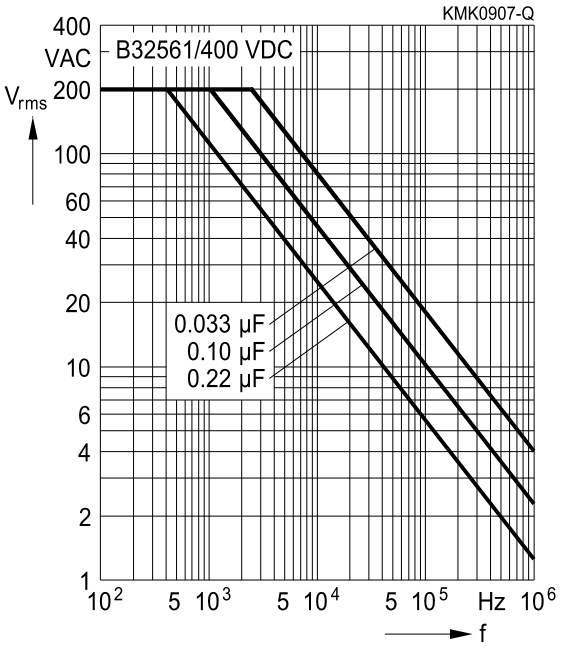
100 VDC/63 VAC



250 VDC/160 VAC



400 VDC/200 VAC

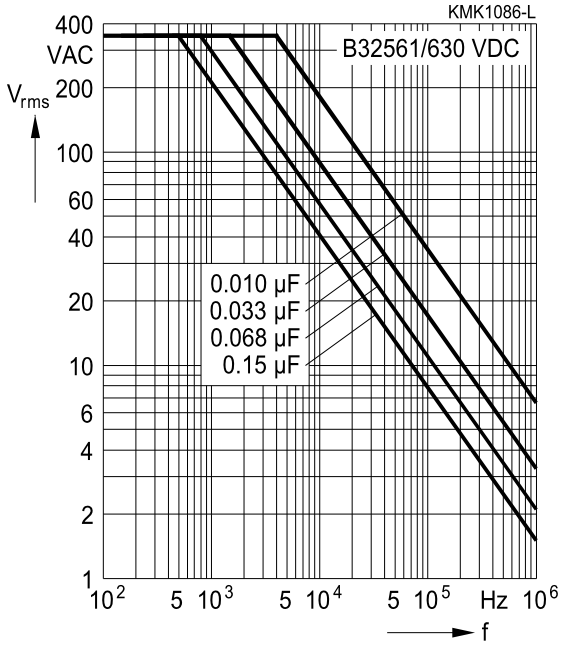


Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55$ °C)

For T_A >55 °C, please refer to "General technical information", section 3.2.3.

Lead spacing 10 mm

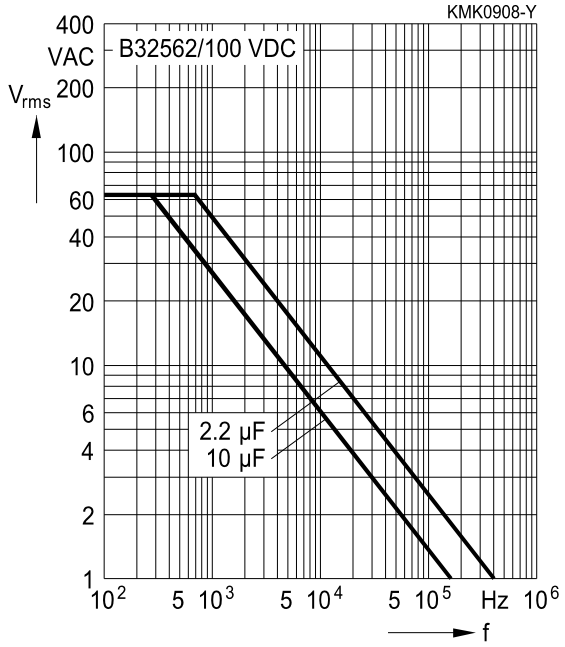
630 VDC/350 VAC



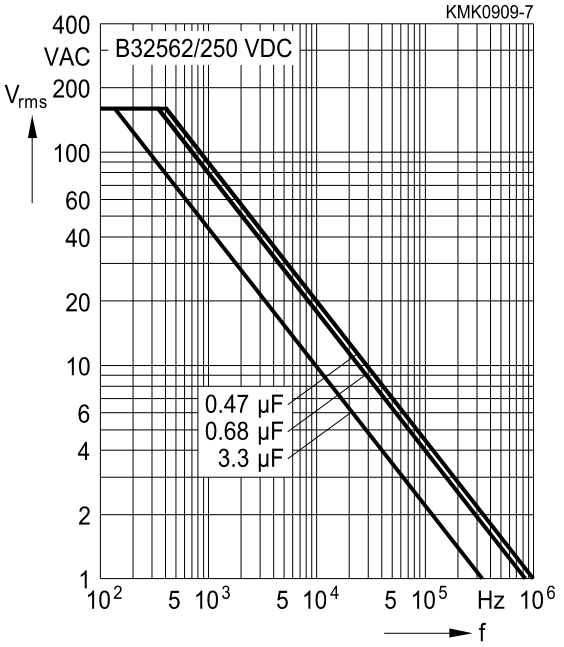
Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55$ °C)
For T_A >55 °C, please refer to "General technical information", section 3.2.3.

Lead spacing 15 mm

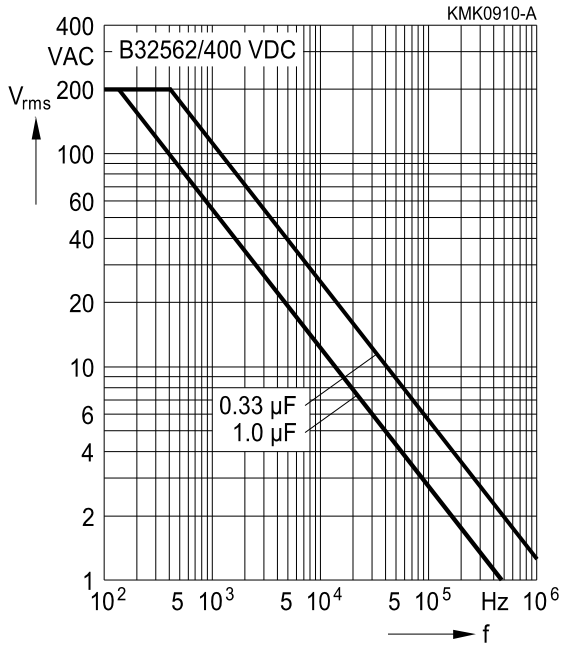
100 VDC/63 VAC



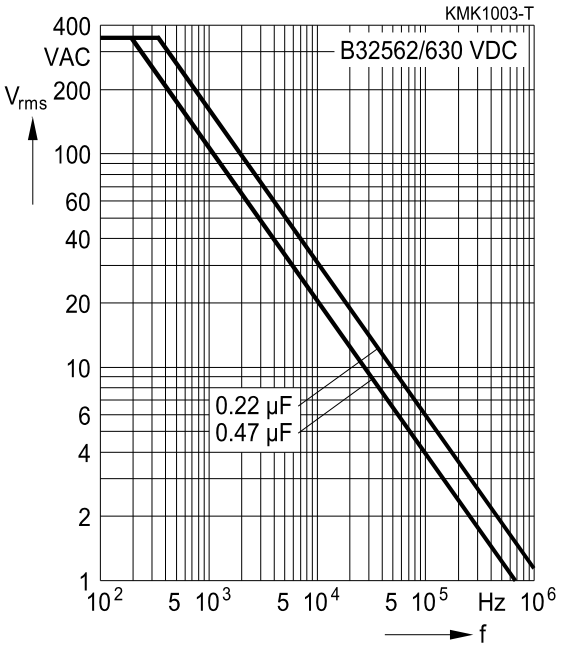
250 VDC/160 VAC



400 VDC/200 VAC



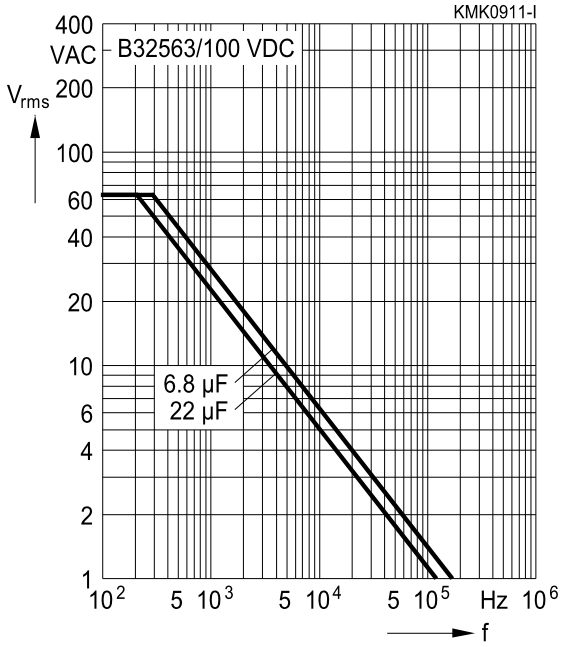
630 VDC/350 VAC



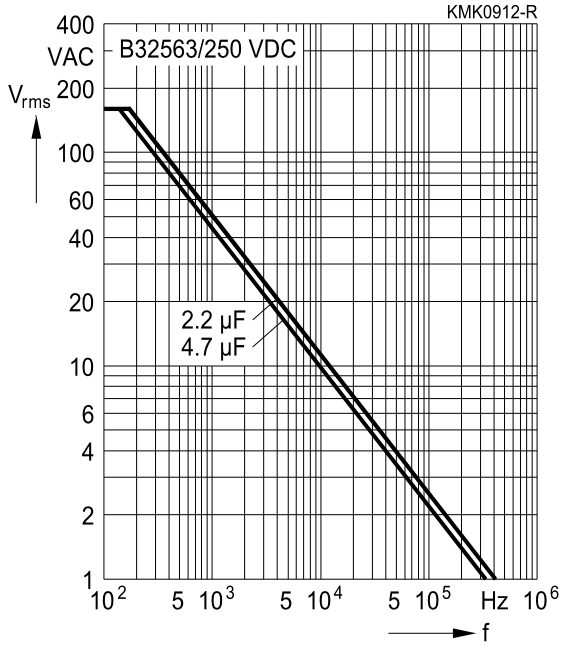
Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55$ °C)
For T_A >55 °C, please refer to "General technical information", section 3.2.3.

Lead spacing 22.5 mm

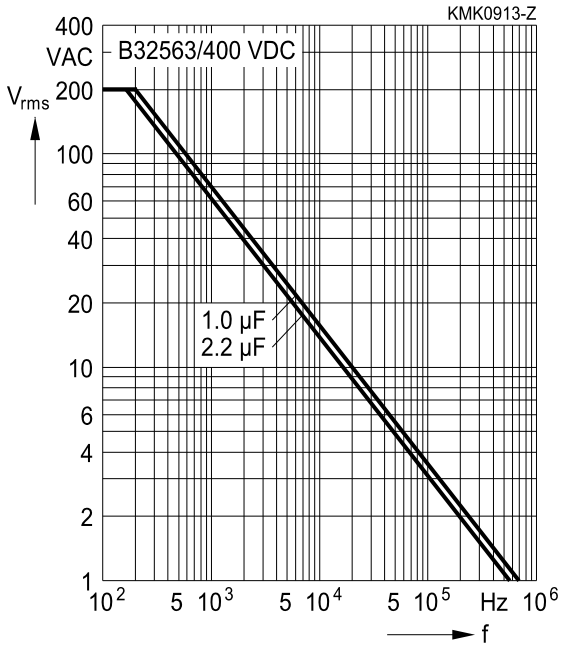
100 VDC/63 VAC



250 VDC/160 VAC



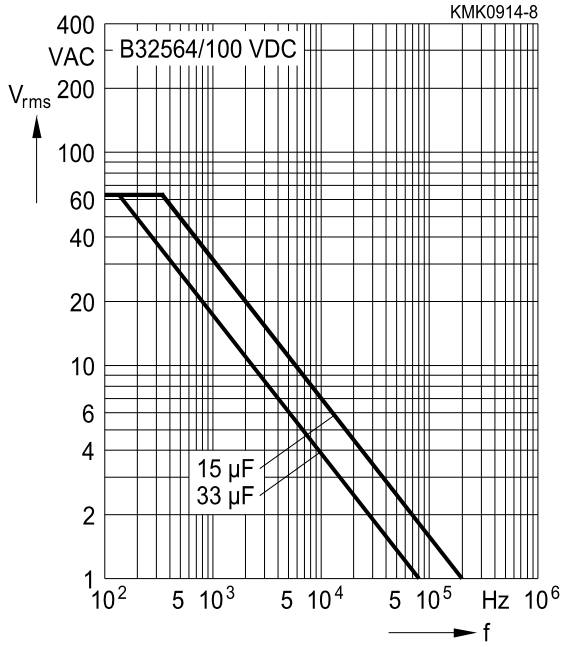
400 VDC/200 VAC



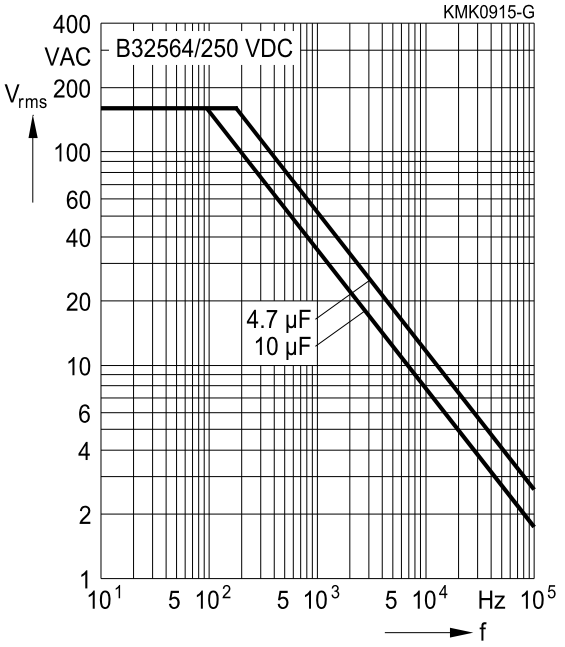
Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 55$ °C)
For T_A >55 °C, please refer to "General technical information", section 3.2.3.

Lead spacing 27.5 mm

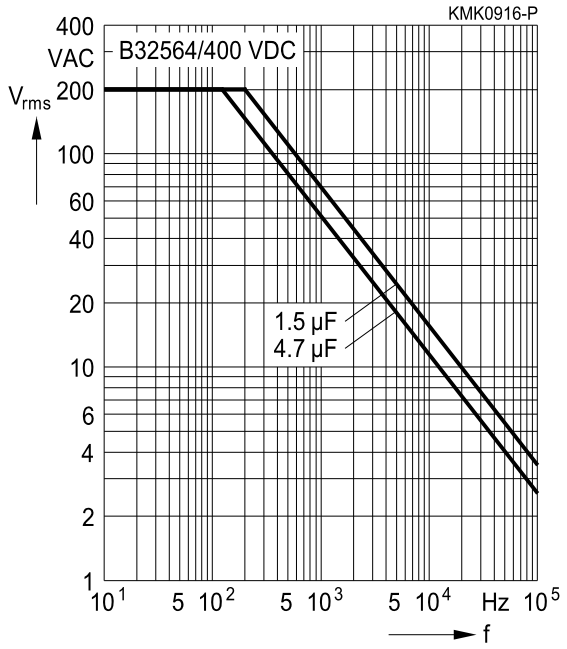
100 VDC/63 VAC



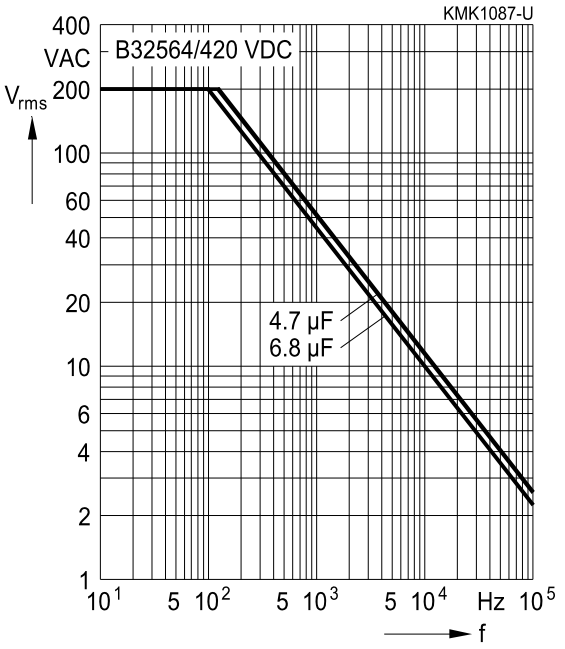
250 VDC/160 VAC



400 VDC/200 VAC



420 VDC/200 VAC



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