



Film Capacitors

Metallized Polypropylene Film Capacitors (MKP)

Series/Type: B32656S
Date: August 2004

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Snubbing (wound)

Typical applications

- IGBT
- Snubbing

Climatic

- Max. operating temperature: 100 °C
- Climatic category (IEC 60068-1): 55/100/56

Construction

- Dielectric: polypropylene (PP)
- Wound capacitor technology with internal series connection
- Plastic case (UL 94 V-0)
- Epoxy resin sealing (UL 94 V-0)

Features

- High pulse strength and high contact reliability
- Very low inductance

Terminals

- Strap terminals, tinned copper (max. torque 10 Nm)

Marking

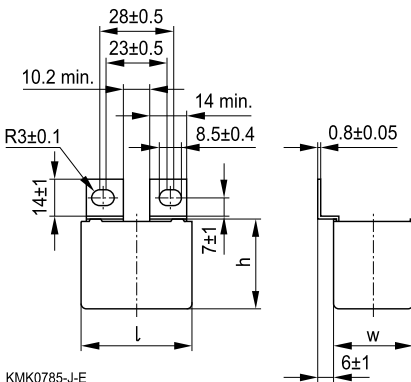
Manufacturer's logo, ordering code, style (MKP)
rated capacitance (coded), cap. tolerance (code letter),
rated DC voltage, date of manufacture (coded)

Delivery mode

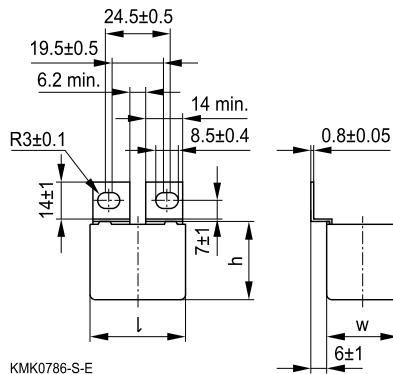
Bulk

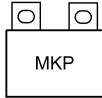
Dimensional drawings

T1 (code no. 561)



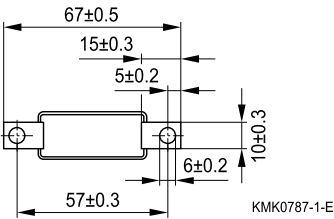
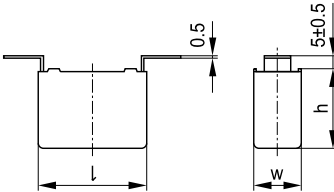
T2 (code no. 562)



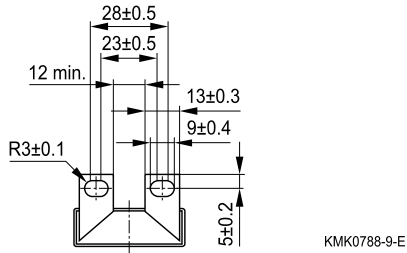
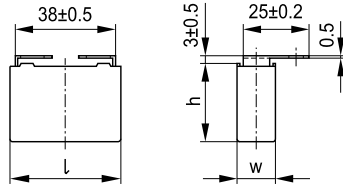


Dimensional drawings (continued)

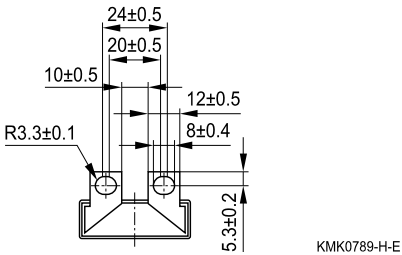
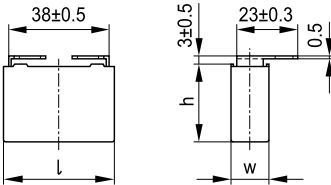
T3 (code no. 563)



T4 (code no. 564)



T5 (code no. 565)





B32656S

Snubbing (wound)

Overview of available types

Type	B32656S				
V_R (VDC)	850	1000	1250	1600	2000
V_{rms} (VAC)	450	480	500	750	800
C_R (nF)					
47					
68					
100					
120					
150					
220					
270					
330					
390					
470					
560					
680					
820					
1000					
1200					
1500					
1800					
2200					

Electrical specifications, ordering codes and packing units

V_R	V_{rms} $f \leq 1 \text{ kHz}$	C_R	Max. dimensions $w \times h \times l$ mm	I_{rms} 100 kHz A	ESR 100 kHz $m\Omega$	Ordering code (composition see below)	Ter- minal	pcs./ unit
VDC	VAC	nF						
850	450	220	$12.0 \times 22.5 \times 42.0$	5	10.0	B32656S8224+563	T3	56
		220	$12.0 \times 22.5 \times 42.0$	5	10.0	B32656S8224+564	T4	96
		270	$12.0 \times 22.5 \times 42.0$	6	9.0	B32656S8274+563	T3	56
		270	$12.0 \times 22.5 \times 42.0$	6	9.0	B32656S8274+564	T4	96
		330	$12.0 \times 22.5 \times 42.0$	6	9.0	B32656S8334+563	T3	56
		330	$12.0 \times 22.5 \times 42.0$	6	9.0	B32656S8334+564	T4	96
		390	$12.0 \times 22.5 \times 42.0$	7	8.0	B32656S8394+563	T3	56
		390	$12.0 \times 22.5 \times 42.0$	7	8.0	B32656S8394+564	T4	96
		470	$12.0 \times 22.5 \times 42.0$	8	8.0	B32656S8474+563	T3	56
		470	$12.0 \times 22.5 \times 42.0$	8	8.0	B32656S8474+564	T4	96
		560	$14.0 \times 25.0 \times 42.0$	8	7.0	B32656S8564+563	T3	48
		560	$14.0 \times 25.0 \times 42.0$	8	7.0	B32656S8564+564	T4	72
		560	$14.0 \times 25.0 \times 42.0$	8	7.0	B32656S8564+565	T5	72
		680	$16.0 \times 28.5 \times 42.0$	9	6.0	B32656S8684+563	T3	40
		680	$16.0 \times 28.5 \times 42.0$	9	6.0	B32656S8684+564	T4	48
		680	$16.0 \times 28.5 \times 42.0$	9	6.0	B32656S8684+565	T5	48
		820	$16.0 \times 28.5 \times 42.0$	10	6.0	B32656S8824+563	T3	40
		820	$16.0 \times 28.5 \times 42.0$	10	6.0	B32656S8824+564	T4	48
		820	$16.0 \times 28.5 \times 42.0$	10	6.0	B32656S8824+565	T5	48
		1000	$18.0 \times 32.5 \times 42.0$	11	6.0	B32656S8105+563	T3	36
		1000	$18.0 \times 32.5 \times 42.0$	11	6.0	B32656S8105+564	T4	32
		1000	$18.0 \times 32.5 \times 42.0$	11	6.0	B32656S8105+565	T5	32
		1200	$18.0 \times 32.5 \times 42.0$	11	5.0	B32656S8125+563	T3	36
		1200	$18.0 \times 32.5 \times 42.0$	11	5.0	B32656S8125+564	T4	32
		1200	$18.0 \times 32.5 \times 42.0$	11	5.0	B32656S8125+565	T5	32
		1500	$31.0 \times 26.5 \times 43.6$	13	5.0	B32656S8155+561	T1	32
		1500	$31.0 \times 26.5 \times 43.6$	13	5.0	B32656S8155+562	T2	32
		1500	$31.0 \times 26.5 \times 43.6$	13	5.0	B32656S8155+563	T3	18
		1800	$28.0 \times 37.0 \times 42.0$	15	4.5	B32656S8185+561	T1	27
		1800	$28.0 \times 37.0 \times 42.0$	15	4.5	B32656S8185+562	T2	27
		1800	$28.0 \times 37.0 \times 42.0$	15	4.5	B32656S8185+563	T3	18

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

J = $\pm 5\%$


B32656S
Snubbing (wound)
Electrical specifications, ordering codes and packing units

V_R	V_{rms} $f \leq 1 \text{ kHz}$	C_R	Max. dimensions $w \times h \times l$ mm	I_{rms} 100 kHz A	ESR 100 kHz $m\Omega$	Ordering code (composition see below)	Ter- minal	pcs./ unit
VDC	VAC	nF						
850	450	2200	$30.0 \times 45.0 \times 42.0$	17	3.5	B32656S8225+561	T1	12
		2200	$30.0 \times 45.0 \times 42.0$	17	3.5	B32656S8225+562	T2	12
		2200	$30.0 \times 45.0 \times 42.0$	17	3.5	B32656S8225+563	T3	18

Further E series and intermediate capacitance values on request.

Composition of ordering code

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Electrical specifications, ordering codes and packing units

V_R	V_{rms} $f \leq 1 \text{ kHz}$	C_R	Max. dimensions $w \times h \times l$ mm	I_{rms} 100 kHz A	ESR 100 kHz $m\Omega$	Ordering code (composition see below)	Ter- minal	pcs./ unit
VDC	VAC	nF						
1000	480	220	$12.0 \times 22.5 \times 42.0$	6	10.0	B32656S0224+563	T3	56
		220	$12.0 \times 22.5 \times 42.0$	6	10.0	B32656S0224+564	T4	96
		270	$12.0 \times 22.5 \times 42.0$	7	9.0	B32656S0274+563	T3	56
		270	$12.0 \times 22.5 \times 42.0$	7	9.0	B32656S0274+564	T4	96
		330	$14.0 \times 25.0 \times 42.0$	7	9.0	B32656S0334+563	T3	48
		330	$14.0 \times 25.0 \times 42.0$	7	9.0	B32656S0334+564	T4	72
		330	$14.0 \times 25.0 \times 42.0$	7	9.0	B32656S0334+565	T5	72
		390	$14.0 \times 25.0 \times 42.0$	8	8.0	B32656S0394+563	T3	48
		390	$14.0 \times 25.0 \times 42.0$	8	8.0	B32656S0394+564	T4	72
		390	$14.0 \times 25.0 \times 42.0$	8	8.0	B32656S0394+565	T5	72
		470	$14.0 \times 25.0 \times 42.0$	9	8.0	B32656S0474+563	T3	40
		470	$14.0 \times 25.0 \times 42.0$	9	8.0	B32656S0474+564	T4	48
		470	$14.0 \times 25.0 \times 42.0$	9	8.0	B32656S0474+565	T5	48
		560	$16.0 \times 28.5 \times 42.0$	9	7.0	B32656S0564+563	T3	40
		560	$16.0 \times 28.5 \times 42.0$	9	7.0	B32656S0564+564	T4	48
		560	$16.0 \times 28.5 \times 42.0$	9	7.0	B32656S0564+565	T5	48
		680	$16.0 \times 28.5 \times 42.0$	10	6.0	B32656S0684+563	T3	36
		680	$16.0 \times 28.5 \times 42.0$	10	6.0	B32656S0684+564	T4	32
		680	$16.0 \times 28.5 \times 42.0$	10	6.0	B32656S0684+565	T5	32
		820	$18.0 \times 32.5 \times 42.0$	11	6.0	B32656S0824+563	T3	36
		820	$18.0 \times 32.5 \times 42.0$	11	6.0	B32656S0824+564	T4	32
		820	$18.0 \times 32.5 \times 42.0$	11	6.0	B32656S0824+565	T5	32
		1000	$20.0 \times 39.5 \times 42.0$	12	6.0	B32656S0105+561	T1	24
		1000	$20.0 \times 39.5 \times 42.0$	12	6.0	B32656S0105+562	T2	24
		1000	$20.0 \times 39.5 \times 42.0$	12	6.0	B32656S0105+563	T3	26
		1000	$20.0 \times 39.5 \times 42.0$	12	6.0	B32656S0105+564	T4	24
		1000	$20.0 \times 39.5 \times 42.0$	12	6.0	B32656S0105+565	T5	24
		1200	$20.0 \times 39.5 \times 42.0$	13	5.0	B32656S0125+561	T1	24
		1200	$20.0 \times 39.5 \times 42.0$	13	5.0	B32656S0125+562	T2	24
		1200	$20.0 \times 39.5 \times 42.0$	13	5.0	B32656S0125+563	T3	26
		1200	$20.0 \times 39.5 \times 42.0$	13	5.0	B32656S0125+564	T4	24

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

J = $\pm 5\%$


B32656S
Snubbing (wound)
Electrical specifications, ordering codes and packing units

V_R	V_{rms} $f \leq 1\text{kHz}$	C_R	Max. dimensions $w \times h \times l$ mm	I_{rms} 100 kHz A	ESR 100 kHz m Ω	Ordering code (composition see below)	Ter- minal	pcs./ unit
VDC	VAC	nF						
1000	480	1200	20.0 × 39.5 × 42.0	13	5.0	B32656S0125+565	T5	24
		1500	30.0 × 45.0 × 42.0	15	5.0	B32656S0155+561	T1	12
		1500	30.0 × 45.0 × 42.0	15	5.0	B32656S0155+562	T2	12
		1500	30.0 × 45.0 × 42.0	15	5.0	B32656S0155+563	T3	18
		1800	30.0 × 45.0 × 42.0	16	4.5	B32656S0185+561	T1	12
		1800	30.0 × 45.0 × 42.0	16	4.5	B32656S0185+562	T2	12
		1800	30.0 × 45.0 × 42.0	16	4.5	B32656S0185+563	T3	18

Further E series and intermediate capacitance values on request.

Composition of ordering code

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M = $\pm 20\%$

K = $\pm 10\%$

J = $\pm 5\%$

Electrical specifications, ordering codes and packing units

V_R	V_{rms} $f \leq 1 \text{ kHz}$	C_R	Max. dimensions $w \times h \times l$ mm	I_{rms} 100 kHz A	ESR 100 kHz $m\Omega$	Ordering code (composition see below)	Ter- minal	pcs./ unit
VDC	VAC	nF						
1250	500	120	$12.0 \times 22.5 \times 42.0$	5	15.0	B32656S7124+563	T3	56
		120	$12.0 \times 22.5 \times 42.0$	5	15.0	B32656S7124+564	T4	96
		150	$12.0 \times 22.5 \times 42.0$	6	15.0	B32656S7154+563	T3	56
		150	$12.0 \times 22.5 \times 42.0$	6	15.0	B32656S7154+564	T4	96
		220	$14.0 \times 25.0 \times 42.0$	8	10.0	B32656S7224+563	T3	48
		220	$14.0 \times 25.0 \times 42.0$	8	10.0	B32656S7224+564	T4	72
		220	$14.0 \times 25.0 \times 42.0$	8	10.0	B32656S7224+565	T5	72
		270	$14.0 \times 25.0 \times 42.0$	8	9.0	B32656S7274+563	T3	48
		270	$14.0 \times 25.0 \times 42.0$	8	9.0	B32656S7274+564	T4	72
		270	$14.0 \times 25.0 \times 42.0$	8	9.0	B32656S7274+565	T5	72
		330	$16.0 \times 28.5 \times 42.0$	8	9.0	B32656S7334+563	T3	40
		330	$16.0 \times 28.5 \times 42.0$	8	9.0	B32656S7334+564	T4	48
		330	$16.0 \times 28.5 \times 42.0$	8	9.0	B32656S7334+565	T5	48
		390	$18.0 \times 32.5 \times 42.0$	9	8.0	B32656S7394+563	T3	36
		390	$18.0 \times 32.5 \times 42.0$	9	8.0	B32656S7394+564	T4	32
		390	$18.0 \times 32.5 \times 42.0$	9	8.0	B32656S7394+565	T5	32
		470	$18.0 \times 32.5 \times 42.0$	9	8.0	B32656S7474+563	T3	36
		470	$18.0 \times 32.5 \times 42.0$	9	8.0	B32656S7474+564	T4	32
		470	$18.0 \times 32.5 \times 42.0$	9	8.0	B32656S7474+565	T5	32
		560	$20.0 \times 39.5 \times 42.0$	10	7.0	B32656S7564+561	T1	24
		560	$20.0 \times 39.5 \times 42.0$	10	7.0	B32656S7564+562	T2	24
		560	$20.0 \times 39.5 \times 42.0$	10	7.0	B32656S7564+563	T3	26
		560	$20.0 \times 39.5 \times 42.0$	10	7.0	B32656S7564+564	T4	24
		560	$20.0 \times 39.5 \times 42.0$	10	7.0	B32656S7564+565	T5	24
		680	$20.0 \times 39.5 \times 42.0$	10	6.0	B32656S7684+561	T1	24
		680	$20.0 \times 39.5 \times 42.0$	10	6.0	B32656S7684+562	T2	24
		680	$20.0 \times 39.5 \times 42.0$	10	6.0	B32656S7684+563	T3	26
		680	$20.0 \times 39.5 \times 42.0$	10	6.0	B32656S7684+564	T4	24
		680	$20.0 \times 39.5 \times 42.0$	10	6.0	B32656S7684+565	T5	24
		820	$28.0 \times 37.0 \times 42.0$	11	6.0	B32656S7824+561	T1	27
		820	$28.0 \times 37.0 \times 42.0$	11	6.0	B32656S7824+562	T2	27

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

J = $\pm 5\%$


B32656S
Snubbing (wound)
Electrical specifications, ordering codes and packing units

V_R	V_{rms} $f \leq 1\text{kHz}$	C_R	Max. dimensions $w \times h \times l$ mm	I_{rms} 100 kHz A	ESR 100 kHz m Ω	Ordering code (composition see below)	Ter- minal	pcs./ unit
VDC	VAC	nF						
1250	500	820	$28.0 \times 37.0 \times 42.0$	11	6.0	B32656S7824+563	T3	18
		1000	$28.0 \times 37.0 \times 42.0$	13	6.0	B32656S7105+561	T1	27
		1000	$28.0 \times 37.0 \times 42.0$	13	6.0	B32656S7105+562	T2	27
		1000	$28.0 \times 37.0 \times 42.0$	13	6.0	B32656S7105+563	T3	18
		1200	$30.0 \times 45.0 \times 42.0$	14	5.0	B32656S7125+561	T1	12
		1200	$30.0 \times 45.0 \times 42.0$	14	5.0	B32656S7125+562	T2	12
		1200	$30.0 \times 45.0 \times 42.0$	14	5.0	B32656S7125+563	T3	18

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

J = $\pm 5\%$

Electrical specifications, ordering codes and packing units

V_R	V_{rms} $f \leq 1 \text{ kHz}$	C_R	Max. dimensions $w \times h \times l$ mm	I_{rms} 100 kHz A	ESR 100 kHz $m\Omega$	Ordering code (composition see below)	Ter- minal	pcs./ unit
VDC	VAC	nF						
1600	750	68	$12.0 \times 22.5 \times 42.0$	5	25.0	B32656S1683+563	T3	56
		68	$12.0 \times 22.5 \times 42.0$	5	25.0	B32656S1683+564	T4	96
		100	$12.0 \times 22.5 \times 42.0$	6	20.0	B32656S1104+563	T3	56
		100	$12.0 \times 22.5 \times 42.0$	6	20.0	B32656S1104+564	T4	96
		120	$14.0 \times 25.0 \times 42.0$	6	15.0	B32656S1124+563	T3	48
		120	$14.0 \times 25.0 \times 42.0$	6	15.0	B32656S1124+564	T4	72
		120	$14.0 \times 25.0 \times 42.0$	6	15.0	B32656S1124+565	T5	72
		150	$14.0 \times 25.0 \times 42.0$	7	15.0	B32656S1154+563	T3	48
		150	$14.0 \times 25.0 \times 42.0$	7	15.0	B32656S1154+564	T4	72
		150	$14.0 \times 25.0 \times 42.0$	7	15.0	B32656S1154+565	T5	72
		220	$16.0 \times 28.5 \times 42.0$	9	10.0	B32656S1224+563	T3	40
		220	$16.0 \times 28.5 \times 42.0$	9	10.0	B32656S1224+564	T4	48
		220	$16.0 \times 28.5 \times 42.0$	9	10.0	B32656S1224+565	T5	48
		270	$18.0 \times 32.5 \times 42.0$	10	9.0	B32656S1274+563	T3	36
		270	$18.0 \times 32.5 \times 42.0$	10	9.0	B32656S1274+564	T4	32
		270	$18.0 \times 32.5 \times 42.0$	10	9.0	B32656S1274+565	T5	32
		330	$20.0 \times 39.5 \times 42.0$	10	9.0	B32656S1334+561	T1	24
		330	$20.0 \times 39.5 \times 42.0$	10	9.0	B32656S1334+562	T2	24
		330	$20.0 \times 39.5 \times 42.0$	10	9.0	B32656S1334+563	T3	26
		330	$20.0 \times 39.5 \times 42.0$	10	9.0	B32656S1334+564	T4	24
		330	$20.0 \times 39.5 \times 42.0$	10	9.0	B32656S1334+565	T5	24
		390	$28.0 \times 37.0 \times 42.0$	11	8.0	B32656S1394+561	T1	27
		390	$28.0 \times 37.0 \times 42.0$	11	8.0	B32656S1394+562	T2	27
		390	$28.0 \times 37.0 \times 42.0$	11	8.0	B32656S1394+563	T3	18
		470	$28.0 \times 37.0 \times 42.0$	12	8.0	B32656S1474+561	T1	27
		470	$28.0 \times 37.0 \times 42.0$	12	8.0	B32656S1474+562	T2	27
		470	$28.0 \times 37.0 \times 42.0$	12	8.0	B32656S1474+563	T3	18
		560	$30.0 \times 45.0 \times 42.0$	13	7.0	B32656S1564+561	T1	12
		560	$30.0 \times 45.0 \times 42.0$	13	7.0	B32656S1564+562	T2	12
		560	$30.0 \times 45.0 \times 42.0$	13	7.0	B32656S1564+563	T3	18
		680	$30.0 \times 45.0 \times 42.0$	14	6.0	B32656S1684K561	T1	12

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

J = $\pm 5\%$


B32656S
Snubbing (wound)
Electrical specifications, ordering codes and packing units

V_R	V_{rms} $f \leq 1\text{kHz}$	C_R	Max. dimensions $w \times h \times l$ mm	I_{rms} 100 kHz A	ESR 100 kHz $m\Omega$	Ordering code (composition see below)	Ter- minal	pcs./ unit
VDC	VAC	nF						
1600	750	680	$30.0 \times 45.0 \times 42.0$	14	6.0	B32656S1684K562	T2	12
		680	$30.0 \times 45.0 \times 42.0$	14	6.0	B32656S1684K563	T3	18

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

J = $\pm 5\%$

B32656S	
Snubbing (wound)	

☐	☐
MKP	

Electrical specifications, ordering codes and packing units

V_R	V_{rms} $f \leq 1 \text{ kHz}$	C_R	Max. dimensions $w \times h \times l$ mm	I_{rms} 100 kHz A	ESR 100 kHz $m\Omega$	Ordering code (composition see below)	Ter- minal	pcs./ unit
VDC	VAC	nF						
2000	800	47	$12.0 \times 22.5 \times 42.0$	5	35.0	B32656S2473+563	T3	56
		47	$12.0 \times 22.5 \times 42.0$	5	35.0	B32656S2473+564	T4	96
		68	$14.0 \times 25.0 \times 42.0$	6	25.0	B32656S2683+563	T3	48
		68	$14.0 \times 25.0 \times 42.0$	6	25.0	B32656S2683+564	T4	72
		68	$14.0 \times 25.0 \times 42.0$	6	25.0	B32656S2683+565	T5	72
		100	$14.0 \times 25.0 \times 42.0$	7	20.0	B32656S2104+563	T3	48
		100	$14.0 \times 25.0 \times 42.0$	7	20.0	B32656S2104+564	T4	72
		100	$14.0 \times 25.0 \times 42.0$	7	20.0	B32656S2104+565	T5	72
		120	$16.0 \times 28.5 \times 42.0$	7	15.0	B32656S2124+563	T3	40
		120	$16.0 \times 28.5 \times 42.0$	7	15.0	B32656S2124+564	T4	48
		120	$16.0 \times 28.5 \times 42.0$	7	15.0	B32656S2124+565	T5	48
		150	$18.0 \times 32.5 \times 42.0$	8	15.0	B32656S2154+563	T3	40
		150	$18.0 \times 32.5 \times 42.0$	8	15.0	B32656S2154+564	T4	48
		150	$18.0 \times 32.5 \times 42.0$	8	15.0	B32656S2154+565	T5	48
		220	$20.0 \times 39.5 \times 42.0$	10	10.0	B32656S2224+561	T1	24
		220	$20.0 \times 39.5 \times 42.0$	10	10.0	B32656S2224+562	T2	24
		220	$20.0 \times 39.5 \times 42.0$	10	10.0	B32656S2224+563	T3	26
		220	$20.0 \times 39.5 \times 42.0$	10	10.0	B32656S2224+564	T4	24
		220	$20.0 \times 39.5 \times 42.0$	10	10.0	B32656S2224+565	T5	24
		270	$28.0 \times 37.0 \times 42.0$	11	9.0	B32656S2274+561	T1	27
		270	$28.0 \times 37.0 \times 42.0$	11	9.0	B32656S2274+562	T2	27
		270	$28.0 \times 37.0 \times 42.0$	11	9.0	B32656S2274+563	T3	18
		330	$28.0 \times 37.0 \times 42.0$	12	9.0	B32656S2334+561	T1	27
		330	$28.0 \times 37.0 \times 42.0$	12	9.0	B32656S2334+562	T2	27
		330	$28.0 \times 37.0 \times 42.0$	12	9.0	B32656S2334+563	T3	18
		390	$30.0 \times 45.0 \times 42.0$	13	8.0	B32656S2394+561	T1	12
		390	$30.0 \times 45.0 \times 42.0$	13	8.0	B32656S2394+562	T2	12
		390	$30.0 \times 45.0 \times 42.0$	13	8.0	B32656S2394+563	T3	18
		470	$30.0 \times 45.0 \times 42.0$	15	8.0	B32656S2474+561	T1	12
		470	$30.0 \times 45.0 \times 42.0$	15	8.0	B32656S2474+562	T2	12
		470	$30.0 \times 45.0 \times 42.0$	15	8.0	B32656S2474+563	T3	18

Further E series and intermediate capacitance values on request.

Composition of ordering code

+ = Capacitance tolerance code:

M = $\pm 20\%$

K = $\pm 10\%$

J = $\pm 5\%$


B32656S
Snubbing (wound)

Technical data

Operating temperature range	Max. operating temperature $T_{op,max}$ +100 °C			
	Upper category temperature T_{max} +100 °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	—	0.5	0.5
	10 kHz	—	0.8	1.5
	100 kHz	5.0	—	—
Insulation resistance R_{ins} or time constant $\tau = C_R \cdot R_{ins}$ at 20 °C, rel. humidity $\leq 65\%$ (minimum as-delivered values)	$C_R \leq 0.33 \mu F$		$C_R > 0.33 \mu F$	
	100 GΩ		30000 s	
DC test voltage	$1.6 \cdot V_R$, 2 s			
Category voltage V_C (continuous operation with V_{DC} or V_{AC} at $f \leq 1$ kHz)	T_A (°C)	DC voltage derating		AC voltage derating
	$T_A \leq 85$	$V_C = V_R$		$V_{C,rms} = V_{rms}$
	$85 < T_A \leq 100$	$V_C = V_R \cdot (165 - T_A)/80$		$V_{C,rms} = V_{rms} \cdot (165 - T_A)/80$
Operating voltage V_{op} for short operating periods (V_{DC} or V_{AC} at $f \leq 1$ kHz)	T_A (°C)	DC voltage (max. hours)		AC voltage (max. hours)
	$T_A \leq 85$	$V_{op} = 1.25 \cdot V_C$ (2000 h)		$V_{op} = 1.0 \cdot V_{C,rms}$ (2000 h)
	$85 < T_A \leq 100$	$V_{op} = 1.25 \cdot V_C$ (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 $		$\leq 3\%$	
	Dissipation factor change $\Delta \tan \delta$		$\leq 0.5 \cdot 10^{-3}$ (at 1 kHz)	
			$\leq 1.0 \cdot 10^{-3}$ (at 10 kHz)	
	Insulation resistance R_{ins} or time constant $\tau = C_R \cdot R_{ins}$		$\geq 50\%$ of minimum as-delivered values	
Reliability:				
Failure rate λ	1 fit ($\leq 1 \cdot 10^{-9}/h$) at $0.5 \cdot V_R$, 40 °C			
Service life t_{sL}	200 000 h at $1.0 \cdot V_R$, 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 $\tan \delta$		$> 4 \cdot$ upper limit value	
	Insulation resistance R_{ins}		$< 1500 M\Omega$ ($C_R \leq 0.33 \mu F$)	
	or time constant $\tau = C_R \cdot R_{ins}$		< 500 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:

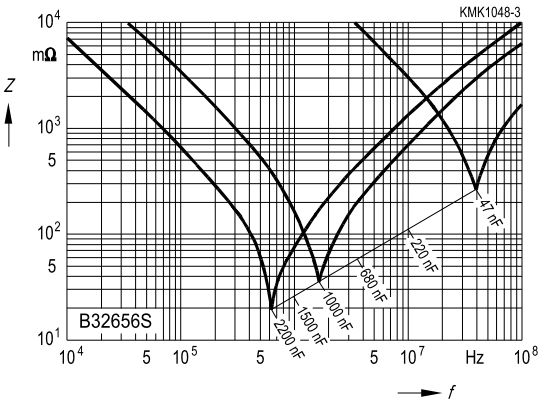
The values of dV/dt and k₀ provided below must not be exceeded in order to avoid damaging the capacitor.

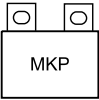
dV/dt and k₀ values

V _R (VDC)	V _{rms} (VAC)	dV/dt in V/ μ s	k ₀ in V ² / μ s
850	450	400	680 000
1000	480	450	900 000
1250	500	500	1 250 000
1600	750	600	1 920 000
2000	800	700	2 800 000

Impedance Z versus frequency f

(typical values)





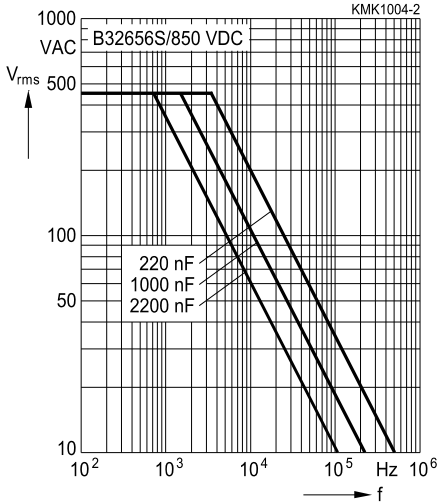
B32656S

Snubbing (wound)

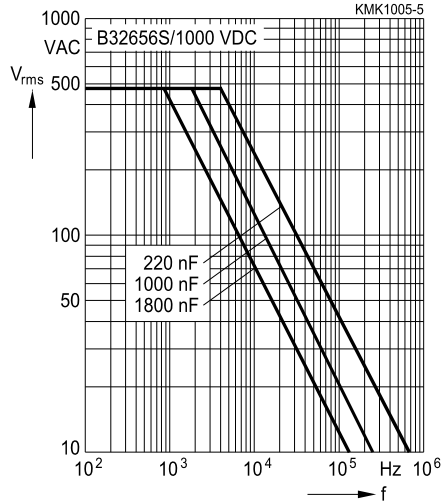
Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 90^\circ \text{C}$)

For $T_A > 90^\circ \text{C}$, please refer to "General technical information", section 3.2.3.

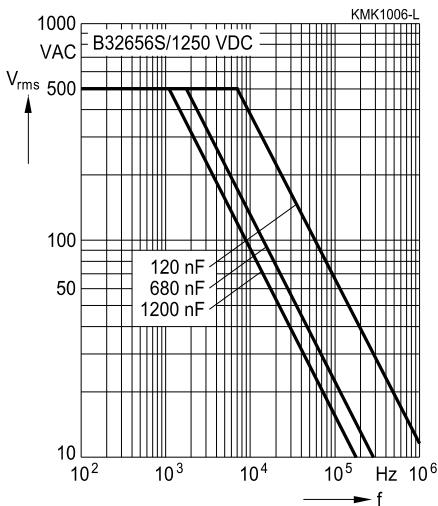
850 VDC/450 VAC



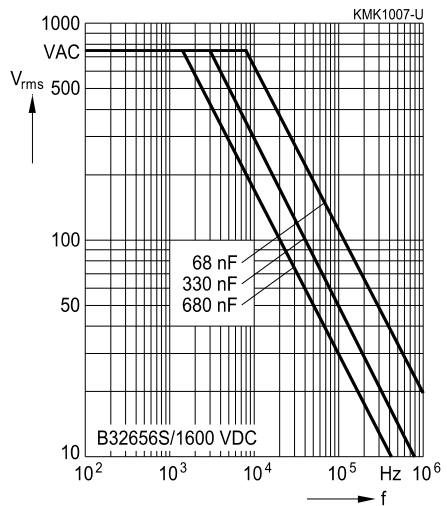
1000 VDC/480 VAC

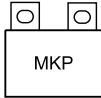


1250 VDC/500 VAC



1600 VDC/750 VAC





Permissible AC voltage V_{rms} versus frequency f (for sinusoidal waveforms, $T_A \leq 90^\circ\text{C}$)

For $T_A > 90^\circ\text{C}$, please refer to "General technical information", section 3.2.3.

2000 VDC/800 VAC

