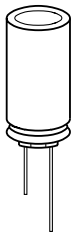
General-purpose grade capacitors


KAL0707-F

Applications

- General-purpose applications in the entertainment industry
- Semi-professional to professional application range
- For filtering, coupling and pulse circuits

Features

- Miniaturized dimensions
- High CU product, i.e. very compact
- Good electrical characteristics
- Replaces all old series B41822 / B43822 / B41835 / B43835

Construction

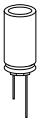
- Radial leads
- Charge-discharge proof, polar
- Aluminum case with insulating sleeve
- Minus pole marking on the insulating sleeve
- Stand off rubber seal
- Case with safety vent from diameter 6,3 mm

Delivery mode

Special terminal configurations and packing:

- Bulk
- Taped, Ammo pack
- Cut
- Kinked
- PAPR (protection against polarity reversal)

Refer to page 503 for further details and ordering example.

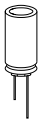


B41821 / B43821

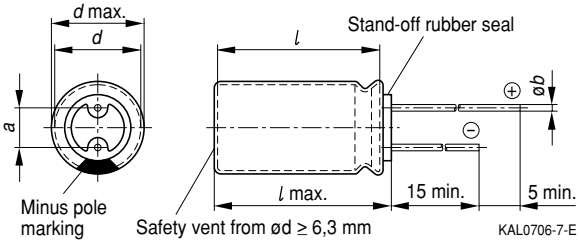
Standard Series – 85 °C

Specifications and characteristics in brief

Type	B41821	B43821
Rated voltage U_R	6,3 … 100 VDC	160 … 450 VDC
Surge voltage U_S	1,15 · U_R	1,1 · U_R
Rated capacitance C_R	0,1 … 10 000 µF	0,47 … 560 µF
Capacitance tolerance	± 20 % ≙ M	± 20 % ≙ M
Useful life		
85 °C; U_R; $I_{\sim R}$	> 2 000 h	> 3 000 h
40 °C; U_R; 1,3 · $I_{\sim R}$	> 100 000 h	—
40 °C; U_R; 1,6 · $I_{\sim R}$	—	> 100 000 h
Requirements:	$\Delta C/C$ ≤ ± 45 % of initial value tan δ ≤ 3 times initial specified limit I_L ≤ initial specified limit Failure percentage: ≤ 1 % Failure rate: ≤ 100 fit (≤ 100 · 10^{-9}/h) (for definiton “fit”, refer to chapter *“Quality”*, page 62)	
Voltage endurance test		
85 °C; U_R	2 000 h	2 000 h
Post test requirements:	ΔC/C ≤ ± 30 % of initial value tan δ ≤ 2 times initial specified limit I_L ≤ initial specified limit	
Vibration resistance	To IEC 60068-2, test Fc: displacement amplitude 0,75 mm, frequency range 10 … 2000 Hz, acceleration max.10 *g*, duration 3 × 2 h	
IEC climatic category	To IEC 60068-1: U_R ≤ 250 V: 40/085/56 (– 40 °C/+ 85 °C/56 days damp heat test) U_R ≥ 350 V: 25/085/56 (– 25 °C/+ 85 °C/56 days damp heat test)	
Sectional specification	IEC 60384-4	

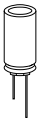


Dimensional drawing



Dimensions and weights

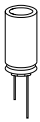
Dimensions (mm)				Approx. weight
$d \times l$	$d_{max} \times l_{max}$	$a \pm 0{,}5$	b	g
5 × 11	5,5 × 12	2,0	0,50 ± 0,05	0,5
6,3 × 11	6,8 × 12	2,5	0,50 ± 0,05	0,7
8 × 11	8,5 × 12	3,5	0,60 ± 0,05	1,0
10 × 12,5	10,5 × 13,5	5,0	0,60 ± 0,05	1,6
10 × 16	10,5 × 17	5,0	0,60 ± 0,05	1,9
10 × 20	10,5 × 22	5,0	0,60 ± 0,05	2,6
12,5 × 20	13 × 22	5,0	0,60 ± 0,05	3,6
12,5 × 25	13 × 27	5,0	0,60 ± 0,05	4,5
16 × 20	16,5 × 22	7,5	0,80 ± 0,05	5,5
16 × 25	16,5 × 27	7,5	0,80 ± 0,05	7,5
16 × 31,5	16,5 × 33,5	7,5	0,80 ± 0,05	7,8
18 × 31,5	18,5 × 32,5	7,5	0,80 ± 0,1	11
18 × 35	18,5 × 36	7,5	0,80 ± 0,1	13
18 × 40	18,5 × 41	7,5	0,80 ± 0,1	16
20 × 30	20,5 × 32	10,0	0,80 ± 0,1	14
20 × 35	20,5 × 37	10,0	0,80 ± 0,1	18
20 × 40	20,5 × 42	10,0	0,80 ± 0,1	20
22 × 35	22,5 × 37	10,0	1,0 ± 0,1	21
22 × 40	22,5 × 42	10,0	1,0 ± 0,1	23



Overview of available types

B41821

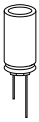
U_R (VDC)	6,3	10	16	25	35	50	63	100
C_R (µF)	Case dimensions $d \times l$ (mm)							
0,1								5 × 11
0,22								5 × 11
0,33								5 × 11
0,47								5 × 11
0,68								5 × 11
1								5 × 11
1,5								5 × 11
2,2								5 × 11
3,3								5 × 11
4,7								5 × 11
6,8							5 × 11	5 × 11
10						5 × 11	5 × 11	6,3 × 11
22						5 × 11	6,3 × 11	8 × 11
33					5 × 11	6,3 × 11	6,3 × 11	10 × 12,5
47				5 × 11	5 × 11	6,3 × 11	8 × 11	10 × 12,5
68			5 × 11	6,3 × 11	6,3 × 11	8 × 11	10 × 12,5	10 × 16
100		5 × 11	5 × 11	6,3 × 11	6,3 × 11	8 × 11	10 × 12,5	10 × 20
150		6,3 × 11	6,3 × 11	8 × 11	8 × 11	10 × 12,5	10 × 16	12,5 × 25
220	6,3 × 11	6,3 × 11	6,3 × 11	8 × 11	10 × 12,5	10 × 12,5	10 × 16	12,5 × 25
270	6,3 × 11	8 × 11	8 × 11	10 × 12,5	10 × 12,5	10 × 16	10 × 20	16 × 25
330	6,3 × 11	8 × 11	8 × 11	10 × 12,5	10 × 12,5	10 × 16	10 × 20	16 × 25
470	8 × 11	8 × 11	10 × 12,5	10 × 12,5	10 × 16	10 × 20	12,5 × 25	16 × 31,5
560	8 × 11	10 × 12,5	10 × 12,5	10 × 16	10 × 20	12,5 × 25	16 × 20	16 × 31,5
680	10 × 12,5	10 × 12,5	10 × 16	10 × 20	10 × 20	12,5 × 25	16 × 25	20 × 30
1 000	10 × 12,5	10 × 12,5	10 × 16	10 × 20	12,5 × 25	16 × 20	16 × 31,5	20 × 40
1 500	10 × 16	10 × 20	12,5 × 25	12,5 × 25	16 × 25	16 × 31,5	18 × 35	
2 200	10 × 20	10 × 20	12,5 × 25	12,5 × 25 16,0 × 20	16 × 25	18 × 35	18 × 40 20 × 40	
3 300	10 × 20	12,5 × 25	16 × 25	16 × 25	18 × 31,5	18 × 40		
4 700	12,5 × 25	16 × 20	16 × 25	16 × 31,5	18 × 40	22 × 40		
6 800		16 × 31,5	18 × 31,5	18 × 40	22 × 40			
8 200		18 × 31,5	20 × 30	22 × 35				
10 000		18 × 35	20 × 35	22 × 40				



B43821

U_R (VDC)	160	200	250	350	400	450
C_R (µF)	Case dimensions $d \times l$ (mm)					
0,47	6,3 × 11	6,3 × 11	6,3 × 11	6,3 × 11		
0,68	6,3 × 11	6,3 × 11	6,3 × 11	6,3 × 11		
1	6,3 × 11	6,3 × 11	6,3 × 11	6,3 × 11		
1,5	6,3 × 11	6,3 × 11	6,3 × 11	8 × 11		
2,2	6,3 × 11	6,3 × 11	6,3 × 11	8 × 11	10 × 12,5	10 × 12,5
3,3	6,3 × 11	6,3 × 11	8 × 11	10 × 12,5	10 × 12,5	10 × 16
4,7	6,3 × 11	8 × 11	8 × 11	10 × 12,5	10 × 16	10 × 20
6,8	8 × 11	10 × 12,5	10 × 12,5	10 × 16	10 × 16	10 × 20
10	8 × 11	10 × 12,5	10 × 16	10 × 20	10 × 20	12,5 × 25
22	10 × 16	10 × 20	10 × 20	12,5 × 25	12,5 × 25 16 × 20	16 × 25
33	10 × 20	10 × 20	12,5 × 20 12,5 × 25	16 × 25	16 × 25	16 × 31,5
47	12,5 × 25	12,5 × 25	12,5 × 25 16 × 20	16 × 25	16 × 31,5	18 × 31,5
68	12,5 × 25 16 × 20	16 × 20	16 × 25	18 × 31,5	18 × 31,5	18 × 35
100	16 × 25	16 × 25	16 × 31,5	20 × 30	20 × 35	20 × 40
150	16 × 31,5	18 × 31,5	18 × 40	20 × 40	20 × 40	
220	18 × 31,5	18 × 35	18 × 40			
270	18 × 40	20 × 35	22 × 35			
330	20 × 30	22 × 35	22 × 40			
470	22 × 35					
560	22 × 40					

Other capacitance and voltage ratings are available upon request.



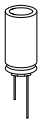
Technical data and ordering codes

U_R VDC	C_R 120 Hz 20 °C µF	Case dimensions $d \times l$ mm	$I_{L,\,max}$ 5 min 20 °C µA	tan δ_{max} 120 Hz 20 °C	ESR_{max} 120 Hz 20 °C Ω	$I_{\sim R}$ 120 Hz 85 °C mA	Ordering code[1]
B41821							
6,3	220	6,3 × 11	14	0,28	2,1	200	B41821A2227M00*
	270	6,3 × 11	17	0,28	1,7	210	B41821A2277M00*
	330	6,3 × 11	21	0,28	1,4	270	B41821A2337M00*
	470	8 × 11	30	0,28	1,0	330	B41821A2477M00*
	560	8 × 11	35	0,28	0,83	360	B41821A2567M00*
	680	10 × 12,5	43	0,28	0,68	460	B41821A2687M00*
	1 000	10 × 12,5	63	0,28	0,46	560	B41821A2108M00*
	1 500	10 × 16	95	0,28	0,31	750	B41821A2158M00*
	2 200	10 × 20	139	0,30	0,23	950	B41821A2228M00*
	3 300	10 × 20	208	0,32	0,16	1 050	B41821A2338M00*[2]
	4 700	12,5 × 25	296	0,34	0,12	1 300	B41821A2478M00*[2]
10	100	5 × 11	10	0,24	4,0	145	B41821A3107M00*
	150	6,3 × 11	15	0,24	2,7	160	B41821A3157M00*
	220	6,3 × 11	22	0,24	1,8	240	B41821A3227M00*
	270	8 × 11	27	0,24	1,5	255	B41821A3277M00*
	330	8 × 11	33	0,24	1,2	280	B41821A3337M00*
	470	8 × 11	47	0,24	0,85	400	B41821A3477M00*
	560	10 × 12,5	56	0,24	0,71	420	B41821A3567M00*
	680	10 × 12,5	68	0,24	0,59	460	B41821A3687M00*
	1 000	10 × 12,5	100	0,24	0,40	640	B41821A3108M00*
	1 500	10 × 20	150	0,24	0,27	730	B41821A3158M00*
	2 200	10 × 20	220	0,26	0,20	1 040	B41821A3228M00*
	3 300	12,5 × 25	330	0,28	0,14	1 450	B41821A3338M00*
	4 700	16 × 20	470	0,30	0,11	1 540	B41821A3478M00*[2]
	6 800	16 × 31,5	680	0,34	0,08	2 110	B41821A3688M00*[2]
	8 200	18 × 31,5	820	0,38	0,08	2 310	B41821A3828M00*[2]
	10 000	18 × 35	1 000	0,42	0,07	2 520	B41821A3109M00*[2]

Preferred types

1) * = "0" for bulk version.
For taping versions, other lead configurations and packing information see page 503.

2) Type available upon request



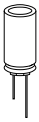
Technical data and ordering codes

U_R VDC	C_R 120 Hz 20 °C µF	Case dimensions $d \times l$ mm	$I_{L,\,max}$ 5 min 20 °C µA	tan δ_{max} 120 Hz 20 °C	ESR_{max} 120 Hz 20 °C Ω	$I_{\sim R}$ 120 Hz 85 °C mA	Ordering code[1]
16	68	5 × 11	11	0,20	4,9	90	B41821A4686M00*
	100	5 × 11	16	0,20	3,3	160	B41821A4107M00*
	150	6,3 × 11	24	0,20	2,2	165	B41821A4157M00*
	220	6,3 × 11	35	0,20	1,5	260	B41821F4227M00*
	270	8 × 11	43	0,20	1,2	270	B41821A4277M00*
	330	8 × 11	53	0,20	1,0	350	B41821A4337M00*
	470	10 × 12,5	75	0,20	0,71	500	B41821A4477M00*
	560	10 × 12,5	90	0,20	0,59	450	B41821A4567M00*
	680	10 × 16	109	0,20	0,49	540	B41821A4687M00*
	1 000	10 × 16	160	0,20	0,33	790	B41821A4108M00*
	1 500	12,5 × 25	240	0,20	0,22	970	B41821A4158M00*
	2 200	12,5 × 25	352	0,22	0,17	1 350	B41821A4228M00*
	3 300	16 × 25	528	0,24	0,12	1 580	B41821A4338M00*
	4 700	16 × 25	752	0,26	0,09	2 100	B41821A4478M00*[2]
	6 800	18 × 31,5	1 088	0,30	0,07	2 250	B41821A4688M00*[2]
	8 200	20 × 30	1 312	0,34	0,07	2 500	B41821A4828M00*[2]
	10 000	20 × 35	1 600	0,38	0,06	2 600	B41821A4109M00*[2]
25	47	5 × 11	12	0,16	5,6	115	B41821A5476M00*
	68	6,3 × 11	17	0,16	3,9	125	B41821A5686M00*
	100	6,3 × 11	25	0,16	2,7	190	B41821A5107M00*
	150	8 × 11	38	0,16	1,8	200	B41821A5157M00*
	220	8 × 11	55	0,16	1,2	330	B41821A5227M00*
	270	10 × 12,5	68	0,16	1,0	350	B41821A5277M00*
	330	10 × 12,5	83	0,16	0,80	400	B41821A5337M00*
	470	10 × 12,5	118	0,16	0,56	550	B41821B5477M00*
	560	10 × 16	140	0,16	0,47	590	B41821A5567M00*
	680	10 × 20	170	0,16	0,39	660	B41821A5687M00*
	1 000	10 × 20	250	0,16	0,27	960	B41821A5108M00*
	1 500	12,5 × 25	375	0,16	0,18	1 100	B41821A5158M00*

Preferred types

1) * = "0" for bulk version.
For taping versions, other lead configurations and packing information see page 503.

2) Type available upon request



B41821 / B43821

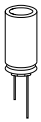
Standard Series – 85 °C

Technical data and ordering codes

U_R VDC	C_R 120 Hz 20 °C µF	Case dimensions $d \times l$ mm	$I_{L,\,max}$ 5 min 20 °C µA	tan δ_{max} 120 Hz 20 °C	ESR_{max} 120 Hz 20 °C Ω	$I_{\sim R}$ 120 Hz 85 °C mA	Ordering code[1]
25	2 200	12,5 × 25	550	0,18	0,14	1 550	B41821F5228M00*
	2 200	16 × 20	550	0,18	0,14	1 600	B41821A5228M00*
	3 300	16 × 25	825	0,20	0,10	1 980	B41821A5338M00*
	4 700	16 × 31,5	1 175	0,22	0,08	2 450	B41821A5478M00*
	6 800	18 × 40	1 700	0,26	0,06	2 600	B41821A5688M00*
	8 200	22 × 35	2 050	0,30	0,06	2 700	B41821A5828M00*
	10 000	22 × 40	2 500	0,34	0,06	3 000	B41821A5109M00*
35	33	5 × 11	12	0,14	7,0	85	B41821A7336M00*
	47	5 × 11	16	0,14	4,9	130	B41821A7476M00*
	68	6,3 × 11	24	0,14	3,4	160	B41821A7686M00*
	100	6,3 × 11	35	0,14	2,3	180	B41821F7107M00*
	150	8 × 11	53	0,14	1,5	270	B41821A7157M00*
	220	10 × 12,5	77	0,14	1,1	390	B41821A7227M00*
	270	10 × 12,5	95	0,14	0,9	430	B41821A7277M00*
	330	10 × 12,5	116	0,14	0,70	450	B41821A7337M00*
	470	10 × 16	165	0,14	0,49	650	B41821A7477M00*
	560	10 × 20	196	0,14	0,41	770	B41821A7567M00*
	680	10 × 20	238	0,14	0,34	840	B41821A7687M00*
	1 000	12,5 × 25	350	0,14	0,23	1 250	B41821A7108M00*
	1 500	16 × 25	525	0,14	0,15	1 400	B41821A7158M00*
	2 200	16 × 25	770	0,16	0,12	1 800	B41821F7228M00*
	3 300	18 × 31,5	1 155	0,18	0,09	2 150	B41821A7338M00*
	4 700	18 × 40	1 645	0,20	0,07	2 300	B41821A7478M00*
	6 800	22 × 40	2 380	0,24	0,06	2 500	B41821A7688M00*
50	10	5 × 11	5	0,12	20	60	B41821A6106M00*
	22	5 × 11	11	0,12	9,0	95	B41821A6226M00*
	33	6,3 × 11	17	0,12	6,0	110	B41821A6336M00*
	47	6,3 × 11	24	0,12	4,2	155	B41821A6476M00*
	68	8 × 11	34	0,12	2,9	190	B41821A6686M00*
	100	8 × 11	50	0,12	2,0	260	B41821A6107M00*
	150	10 × 12,5	75	0,12	1,3	320	B41821A6157M00*

Preferred types

1) * = "0" for bulk version.
For taping versions, other lead configurations and packing information see page 503.

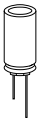


Technical data and ordering codes

U_R VDC	C_R 120 Hz 20 °C µF	Case dimensions $d \times l$ mm	$I_{L,\,max}$ 5 min 20 °C µA	tan δ_{max} 120 Hz 20 °C	ESR_{max} 120 Hz 20 °C Ω	$I_{\sim R}$ 120 Hz 85 °C mA	Ordering code[1)]
50	220	10 × 12,5	110	0,12	0,90	430	B41821A6227M00*
	270	10 × 16	135	0,12	0,74	480	B41821A6277M00*
	330	10 × 16	165	0,12	0,60	510	B41821A6337M00*
	470	10 × 20	235	0,12	0,42	700	B41821A6477M00*
	560	12,5 × 25	280	0,12	0,36	900	B41821A6567M00*
	680	12,5 × 25	340	0,12	0,29	1 030	B41821A6687M00*
	1 000	16 × 20	500	0,12	0,20	1 100	B41821A6108M00*
	1 500	16 × 31,5	750	0,12	0,13	1 540	B41821A6158M00*
	2 200	18 × 35	1 100	0,14	0,11	1 700	B41821A6228M00*
	3 300	18 × 40	1 650	0,16	0,08	1 900	B41821A6338M00*
	4 700	22 × 40	2 350	0,18	0,06	2 200	B41821A6478M00*
63	6,8	5 × 11	4,3	0,12	29	50	B41821A8685M00*
	10	5 × 11	6,3	0,12	20	60	B41821A8106M00*
	22	6,3 × 11	14	0,12	9,0	110	B41821A8226M00*
	33	6,3 × 11	21	0,12	6,0	130	B41821A8336M00*
	47	8 × 11	30	0,12	4,2	180	B41821A8476M00*
	68	10 × 12,5	43	0,12	2,9	230	B41821A8686M00*
	100	10 × 12,5	63	0,12	2,0	290	B41821A8107M00*
	150	10 × 16	95	0,12	1,3	360	B41821A8157M00*
	220	10 × 16	139	0,12	0,90	470	B41821A8227M00*
	270	10 × 20	170	0,12	0,74	500	B41821A8277M00*
	330	10 × 20	208	0,12	0,60	620	B41821A8337M00*
	470	12,5 × 25	296	0,12	0,42	900	B41821A8477M00*
	560	16 × 20	353	0,12	0,36	930	B41821A8567M00*
	680	16 × 25	428	0,12	0,29	1 100	B41821A8687M00*
	1 000	16 × 31,5	630	0,12	0,20	1 500	B41821A8108M00*
	1 500	18 × 35	945	0,12	0,13	1 900	B41821A8158M00*
	2 200	18 × 40	1 386	0,14	0,11	2 100	B41821F8228M00*

Preferred types

1) * = "0" for bulk version.
For taping versions, other lead configurations and packing information see page 503.



B41821 / B43821

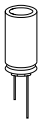
Standard Series – 85 °C

Technical data and ordering codes

U_R VDC	C_R 120 Hz 20 °C µF	Case dimensions $d \times l$ mm	$I_{L,\,max}$ 5 min 20 °C µA	tan δ_{max} 120 Hz 20 °C	ESR_{max} 120 Hz 20 °C Ω	$I_{\sim R}$ 120 Hz 85 °C mA	Ordering code[1]
100	0,10	5 × 11	3,0	0,10	1 658	2,0	B41821A9104M00*
	0,22	5 × 11	3,0	0,10	754	4,0	B41821A9224M00*
	0,33	5 × 11	3,0	0,10	502	7,0	B41821A9334M00*
	0,47	5 × 11	3,0	0,10	353	10	B41821A9474M00*
	0,68	5 × 11	3,0	0,10	244	13	B41821A9684M00*
	1,0	5 × 11	3,0	0,10	166	21	B41821A9105M00*
	1,5	5 × 11	3,0	0,10	111	24	B41821A9155M00*
	2,2	5 × 11	3,0	0,10	75	30	B41821A9225M00*
	3,3	5 × 11	3,3	0,10	50	40	B41821A9335M00*
	4,7	5 × 11	4,7	0,10	35	45	B41821A9475M00*
	10	6,3 × 11	10	0,10	17	75	B41821A9106M00*
	22	8 × 11	22	0,10	7,5	130	B41821A9226M00*
	33	10 × 12,5	33	0,10	5,0	190	B41821A9336M00*
	47	10 × 12,5	47	0,10	3,5	230	B41821B9476M00*
	68	10 × 16	68	0,10	2,4	280	B41821A9686M00*
	100	10 × 20	100	0,10	1,7	350	B41821A9107M00*
	150	12,5 × 25	150	0,10	1,1	550	B41821A9157M00*
	220	12,5 × 25	220	0,10	0,75	620	B41821A9227M00*
	270	16 × 25	270	0,10	0,61	770	B41821A9277M00*
	330	16 × 25	330	0,10	0,50	800	B41821A9337M00*
	470	16 × 31,5	470	0,10	0,35	900	B41821A9477M00*
	560	16 × 31,5	560	0,10	0,30	1 000	B41821A9567M00*
	680	20 × 30	680	0,10	0,24	1 100	B41821A9687M00*
	1 000	20 × 40	1 000	0,10	0,17	1 300	B41821A9108M00*

Preferred types

1) * = "0" for bulk version.
For taping versions, other lead configurations and packing information see page 503.

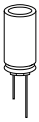


Technical data and ordering codes

U_R VDC	C_R 120 Hz 20 °C µF	Case dimensions $d \times l$ mm	$I_{L,\,max}$ 5 min 20 °C µA	tan δ_{max} 120 Hz 20 °C	ESR_{max} 120 Hz 20 °C Ω	$I_{\sim R}$ 120 Hz 85 °C mA	Ordering code[1]
B43821							
160	0,47	6,3 × 11	17	0,20	705	14	B43821A1474M00*
	0,68	6,3 × 11	18	0,20	488	16	B43821A1684M00*
	1,0	6,3 × 11	20	0,20	332	21	B43821A1105M00*
	1,5	6,3 × 11	22	0,20	221	30	B43821A1155M00*
	2,2	6,3 × 11	26	0,20	151	40	B43821A1225M00*
	3,3	6,3 × 11	31	0,20	100	45	B43821A1335M00*
	4,7	6,3 × 11	38	0,20	71	50	B43821F1475M00*
	6,8	8 × 11	48	0,20	49	62	B43821A1685M00*
	10	8 × 11	63	0,20	33	80	B43821F1106M00*
	22	10 × 16	121	0,20	15	130	B43821A1226M00*
	33	10 × 20	173	0,20	10	175	B43821A1336M00*
	47	12,5 × 25	241	0,20	7,1	285	B43821A1476M00*
	68	12,5 × 25	341	0,20	4,9	330	B43821F1686M00*
	68	16 × 20	341	0,20	4,9	330	B43821A1686M00*
	100	16 × 25	495	0,20	3,3	410	B43821A1107M00*
	150	16 × 31,5	735	0,20	2,2	520	B43821A1157M00*
	220	18 × 31,5	1 071	0,20	1,5	660	B43821A1227M00*
	270	18 × 40	1 311	0,20	1,2	700	B43821A1277M00*
	330	20 × 30	1 599	0,20	1,0	750	B43821A1337M00*
	470	22 × 35	2 271	0,20	0,71	1 000	B43821A1477M00*
	560	22 × 40	2 703	0,20	0,59	1 100	B43821A1567M00*
200	0,47	6,3 × 11	18	0,20	705	14	B43821A2474M00*
	0,68	6,3 × 11	19	0,20	488	16	B43821A2684M00*
	1,0	6,3 × 11	21	0,20	332	21	B43821A2105M00*
	1,5	6,3 × 11	24	0,20	221	30	B43821A2155M00*
	2,2	6,3 × 11	28	0,20	151	40	B43821A2225M00*
	3,3	6,3 × 11	35	0,20	100	45	B43821A2335M00*
	4,7	8 × 11	43	0,20	71	55	B43821A2475M00*
	6,8	10 × 12,5	56	0,20	49	78	B43821A2685M00*
	10	10 × 12,5	75	0,20	33	80	B43821B2106M00*

Preferred types

1) * = "0" for bulk version.
For taping versions, other lead configurations and packing information see page 503.

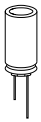


Technical data and ordering codes

U_R VDC	C_R 120 Hz 20 °C µF	Case dimensions $d \times l$ mm	$I_{L,\,max}$ 5 min 20 °C µA	tan δ_{max} 120 Hz 20 °C	ESR_{max} 120 Hz 20 °C Ω	$I_{\sim R}$ 120 Hz 85 °C mA	Ordering code[1]
200	22	10 × 20	147	0,20	15	140	B43821A2226M00*
	33	10 × 20	213	0,20	10	155	B43821B2336M00*
	47	12,5 × 25	297	0,20	7,1	290	B43821A2476M00*
	68	16 × 20	423	0,20	4,9	330	B43821A2686M00*
	100	16 × 25	615	0,20	3,3	410	B43821A2107M00*
	150	18 × 31,5	915	0,20	2,2	540	B43821A2157M00*
	220	18 × 35	1 335	0,20	1,5	1 000	B43821A2227M00*
	270	20 × 35	1 635	0,20	1,2	1 100	B43821A2277M00*
	330	22 × 35	1 995	0,20	1,0	1 200	B43821A2337M00*
250	0,47	6,3 × 11	19	0,20	705	12	B43821F2474M00*
	0,68	6,3 × 11	20	0,20	488	17	B43821F2684M00*
	1,0	6,3 × 11	23	0,20	332	21	B43821F2105M00*
	1,5	6,3 × 11	26	0,20	221	30	B43821F2155M00*
	2,2	6,3 × 11	32	0,20	151	45	B43821F2225M00*
	3,3	8 × 11	40	0,20	100	50	B43821F2335M00*
	4,7	8 × 11	50	0,20	71	55	B43821K2475M00*
	6,8	10 × 12,5	66	0,20	49	78	B43821F2685M00*
	10	10 × 16	90	0,20	33	105	B43821F2106M00*
	22	10 × 20	180	0,20	15	145	B43821F2226M00*
	33	12,5 × 20	263	0,20	10	230	B43821K2336M00*
	33	12,5 × 25	263	0,20	10	250	B43821F2336M00*
	47	12,5 × 25	368	0,20	7,1	295	B43821K2476M00*
	47	16 × 20	368	0,20	7,1	300	B43821F2476M00*
	68	16 × 25	525	0,20	4,9	330	B43821F2686M00*
	100	16 × 31,5	765	0,20	3,3	520	B43821K2107M00*
	150	18 × 40	1 140	0,20	2,2	850	B43821F2157M00*
	220	18 × 40	1 665	0,20	1,5	1 000	B43821F2227M00*
	270	22 × 35	2 040	0,20	1,2	1 100	B43821F2277M00*
	330	22 × 40	2 490	0,20	1,0	1 200	B43821F2337M00*

Preferred types

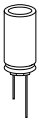
1) * = "0" for bulk version.
For taping versions, other lead configurations and packing information see page 503.



Technical data and ordering codes

U_R VDC	C_R 120 Hz 20 °C µF	Case dimensions $d \times l$ mm	$I_{L,\,max}$ 5 min 20 °C µA	tan δ_{max} 120 Hz 20 °C	ESR_{max} 120 Hz 20 °C Ω	$I_{\sim R}$ 120 Hz 85 °C mA	Ordering code[1)]
350	0,47	6,3 × 11	20	0,20	705	12	B43821A4474M00*
	0,68	6,3 × 11	22	0,20	488	15	B43821A4684M00*
	1,0	6,3 × 11	26	0,20	332	21	B43821A4105M00*
	1,5	8 × 11	31	0,20	221	26	B43821A4155M00*
	2,2	8 × 11	38	0,20	151	30	B43821A4225M00*
	3,3	10 × 12,5	50	0,20	100	45	B43821A4335M00*
	4,7	10 × 12,5	64	0,20	71	55	B43821A4475M00*
	6,8	10 × 16	86	0,20	49	85	B43821A4685M00*
	10	10 × 20	120	0,20	33	95	B43821A4106M00*
	22	12,5 × 25	246	0,20	15	175	B43821A4226M00*
	33	16 × 25	362	0,20	10	240	B43821A4336M00*
	47	16 × 25	509	0,20	7,1	300	B43821F4476M00*
	68	18 × 31,5	729	0,20	4,9	420	B43821A4686M00*
	100	20 × 30	1 065	0,20	3,3	600	B43821A4107M00*
	150	20 × 40	1 590	0,20	2,2	700	B43821A4157M00*
400	2,2	10 × 12,5	41	0,20	151	40	B43821A9225M00*
	3,3	10 × 12,5	55	0,20	100	45	B43821A9335M00*
	4,7	10 × 16	71	0,20	71	60	B43821A9475M00*
	6,8	10 × 16	97	0,20	49	70	B43821A9685M00*
	10	10 × 20	135	0,20	33	95	B43821A9106M00*
	22	12,5 × 25	279	0,20	15	200	B43821F9226M00*
	22	16 × 20	279	0,20	15	180	B43821A9226M00*
	33	16 × 25	411	0,20	10	240	B43821A9336M00*
	47	16 × 31,5	579	0,20	7,1	310	B43821A9476M00*
	68	18 × 35	831	0,20	4,9	420	B43821A9686M00*
	100	20 × 35	1 215	0,20	3,3	600	B43821A9107M00*
	150	20 × 40	1 815	0,20	2,2	700	B43821A9157M00*

1) * = "0" for bulk version.
For taping versions, other lead configurations and packing information see page 503.



B41821 / B43821

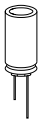
Standard Series – 85 °C

Technical data and ordering codes

U_R VDC	C_R 120 Hz 20 °C µF	Case dimensions $d \times l$ mm	$I_{L,\,max}$ 5 min 20 °C µA	tan δ_{max} 120 Hz 20 °C	ESR_{max} 120 Hz 20 °C Ω	$I_{\sim R}$ 120 Hz 85 °C mA	Ordering code[1]
450	2,2	10 × 12,5	45	0,20	151	28	B43821A5225M00*
	3,3	10 × 16	60	0,20	100	44	B43821A5335M00*
	4,7	10 × 20	78	0,20	71	50	B43821A5475M00*
	6,8	10 × 20	107	0,20	49	75	B43821A5685M00*
	10	12,5 × 25	150	0,20	33	90	B43821A5106M00*
	22	16 × 25	312	0,20	15	165	B43821A5226M00*
	33	16 × 31,5	460	0,20	10	220	B43821A5336M00*
	47	18 × 31,5	650	0,20	7,1	265	B43821A5476M00*
	68	18 × 40	933	0,20	4,9	520	B43821A5686M00*
	100	20 × 40	1 365	0,20	3,3	600	B43821A5107M00*

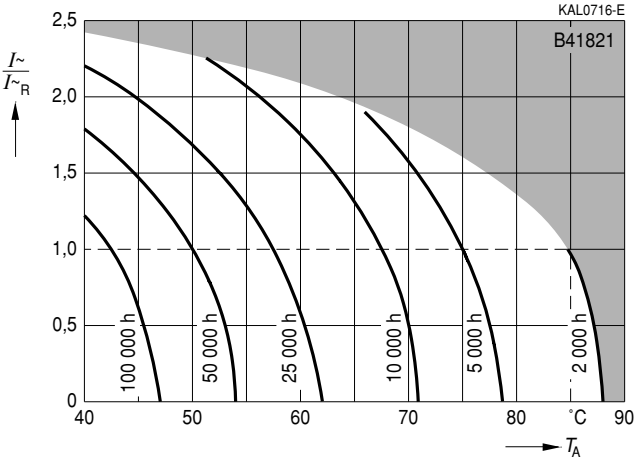
Preferred types

1) * = "0" for bulk version.
For taping versions, other lead configurations and packing information see page 503.



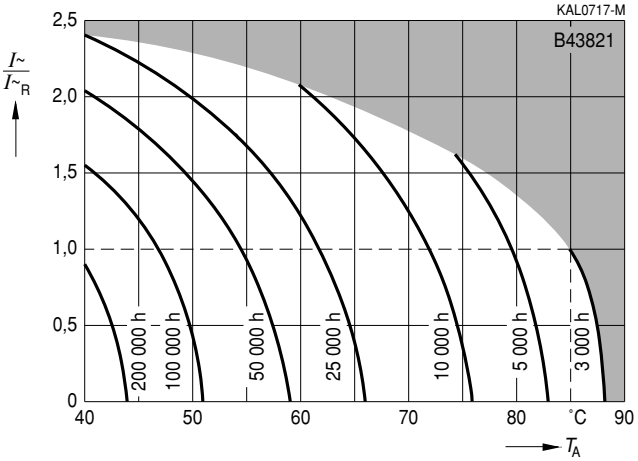
Useful life
depending on ambient temperature T_A under ripple current operating conditions[1)]

U_R = 6,3 … 100 VDC



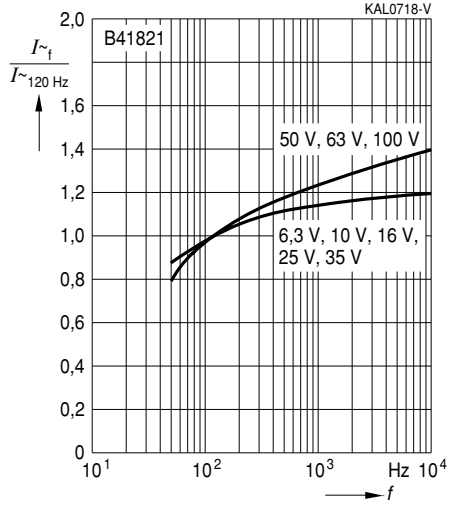
Useful life
depending on case temperature T_C under ripple current operating conditions[1)]

U_R = 160 … 450 VDC

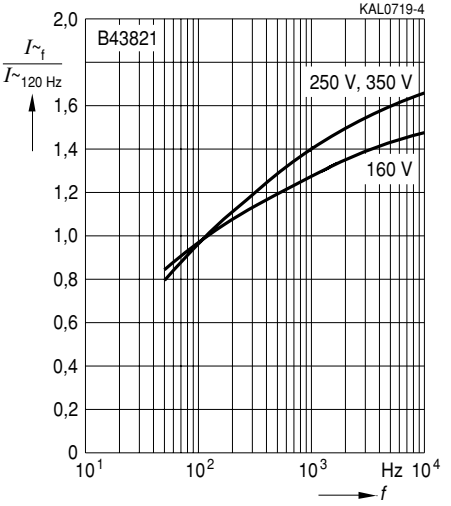


1) Refer to page 40 for an explanation on how to interpret the useful life graphs.

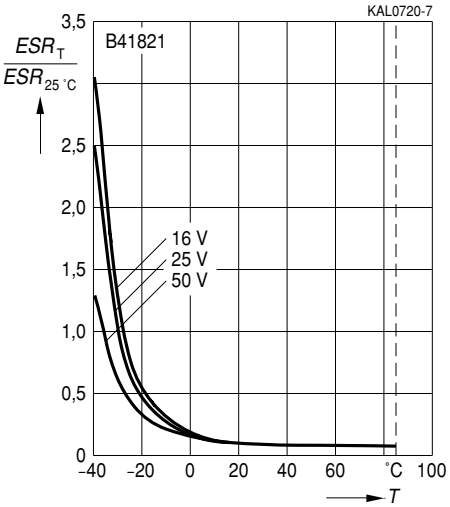
Frequency factor of permissible ripple current *I*~
versus frequency *f*
$U_R \leq 100$ VDC



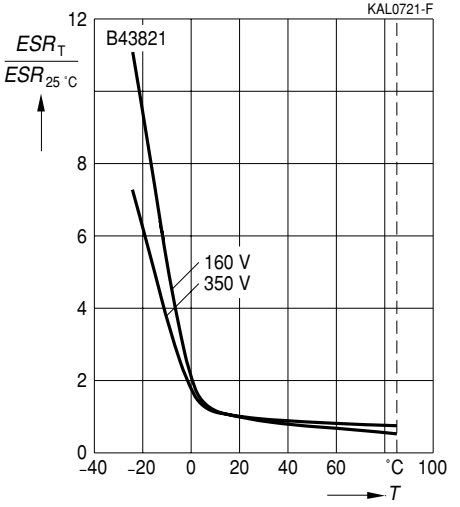
Frequency factor of permissible ripple current *I*~
versus frequency *f*
$U_R \geq 160$ VDC

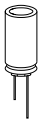


Equivalent series resistance *ESR*
at *f* = 120 Hz versus temperature *T*
Typical behavior
$U_R \leq 100$ VDC

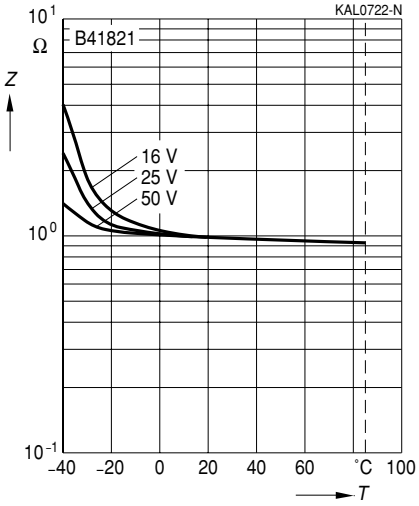


Equivalent series resistance *ESR*
at *f* = 120 Hz versus temperature *T*
Typical behavior
$U_R \geq 160$ VDC

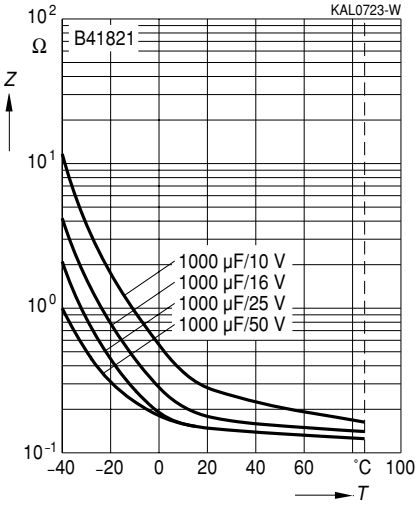




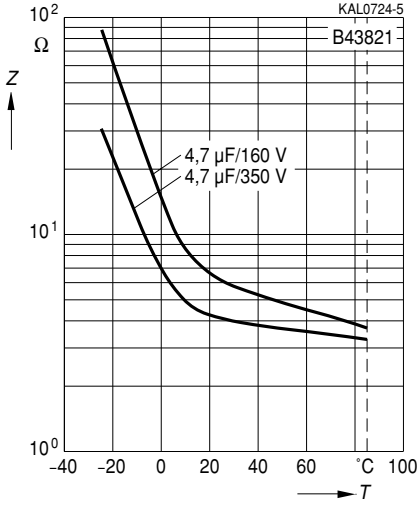
Impedance Z at f = 120 Hz
versus temperature T
Typical behavior
$U_R \leq 100$ VDC



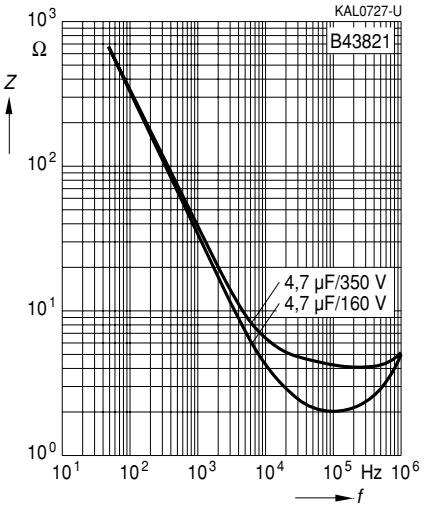
Impedance Z at f = 10 kHz
versus temperature T
Typical behavior
$U_R \leq 100$ VDC



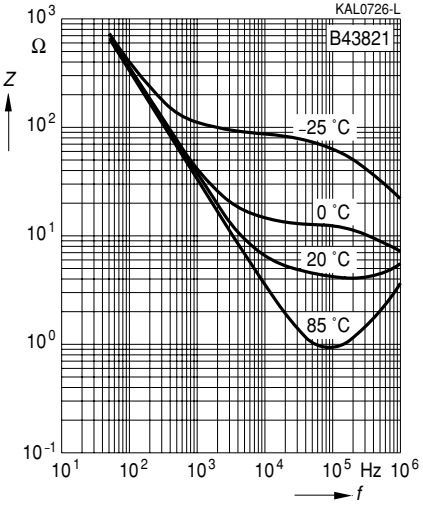
Impedance Z at f = 10 kHz
versus temperature T
Typical behavior
$U_R \geq 160$ VDC



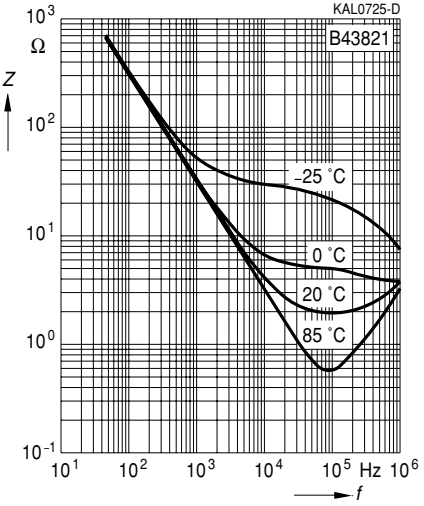
Impedance Z
versus frequency f
Typical behavior at 20 °C
$U_R \geq 160$ VDC



Impedance Z
versus frequency *f* and temperature *T*
for 4,7 µF/160 VDC
Typical behavior



Impedance Z
versus frequency *f* and temperature *T*
for 4,7 µF/350 VDC
Typical behavior



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☎ ++49 89 636 09, FAX (0 89) 636-2 26 89

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Published by EPCOS AG
Corporate Communications, P.O. Box 80 17 09, 81617 Munich, GERMANY
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