

General-purpose grade capacitors

Applications

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

Features

- Miniaturized dimensions
- Operation up to 105 °C
- High CU product, i.e. very compact

Construction

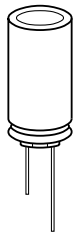
- Radial leads
- Charge-discharge proof, polar
- Aluminum case with insulating sleeve
- Minus pole marking on the insulation sleeve
- Stand off rubber seal
- Case with safety vent from diameter 6,3 mm

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.



KAL0707-F


B41851 / B43851
Standard Series – 105 °C
Specifications and characteristics in brief

| Type | B41851 | B43851 |
|---|---|-------------------------------|
| Rated voltage U_R | 6,3...100 VDC | 160...450 VDC |
| Surge voltage U_S | $1,15 \cdot U_R$ | $1,1 \cdot U_R$ |
| Rated capacitance C_R | 0,1...10 000 μ F | 0,47...470 μ F |
| Capacitance tolerance | $\pm 20 \% \triangleq M$ | $\pm 20 \% \triangleq M$ |
| Useful life 105 °C, U_R ; I_{-R} 40 °C, U_R ; $1,8 \cdot I_{-R}$ 40 °C, U_R ; $2,1 \cdot I_{-R}$ | > 2 000 h > 250 000 h — | > 3 000 h — > 250 000 h |
| Requirements: | $\Delta C/C \leq \pm 45 \%$ of initial value $\tan \delta \leq 3$ times initial specified limit $I_L \leq$ initial specified limit Failure percentage: $\leq 1 \%$ Failure rate: ≤ 100 fit ($\leq 100 \cdot 10^{-9}/h$) (for definition "fit", refer to chapter "Quality", page 62) | |
| Voltage endurance test 105 °C; U_R | 1 000 h | 1 000 h |
| Post test requirements: | $\Delta C/C \leq \pm 30 \%$ of initial value $\tan \delta \leq 2$ times initial specified limit $I_L \leq$ initial specified limit | |
| Vibration resistance | To IEC 60068-2-6, 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: $U_R \leq 250$ V: 40/105/56 (– 40 °C/+ 105 °C/56 days damp heat test) $U_R \geq 350$ V: 25/105/56 (– 25 °C/+ 105 °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 |



B41851 / B43851

Standard Series – 105 °C

Overview of available types

B41851

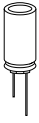
| U_R (VDC) | 6,3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 |
|-------------|-----------------------------------|-----------|-----------|-----------|------------------------|-----------|-----------|-----------|
| C_R (μF) | Case dimensions $d \times l$ (mm) | | | | | | | |
| 0,10 | | | | | | | | 5 × 11 |
| 0,22 | | | | | | | | 5 × 11 |
| 0,33 | | | | | | | | 5 × 11 |
| 0,47 | | | | | | | | 5 × 11 |
| 1,0 | | | | | | 5 × 11 | | 5 × 11 |
| 2,2 | | | | | | 5 × 11 | | 5 × 11 |
| 3,3 | | | | | | 5 × 11 | | 5 × 11 |
| 4,7 | | | | | | 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 |
| 100 | | 5 × 11 | 5 × 11 | 6,3 × 11 | 6,3 × 11 | 8 × 11 | 10 × 12,5 | 10 × 20 |
| 220 | 6,3 × 11 | 6,3 × 11 | 6,3 × 11 | 8 × 11 | 10 × 12,5 | 10 × 12,5 | 10 × 16 | 12,5 × 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 |
| 1 000 | 10 × 12,5 | 10 × 12,5 | 10 × 16 | 10 × 20 | 12,5 × 20 12,5 × 25 | 16 × 20 | 16 × 31,5 | 20 × 40 |
| 2 200 | 10 × 20 | 10 × 20 | 12,5 × 25 | 16 × 20 | 16 × 25 16 × 31,5 | 18 × 35 | 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 | | |
| 10 000 | | 18 × 35 | 20 × 35 | 22 × 40 | | | | |

Other capacitance and voltage ratings are available upon request.


B43851

| U_R (VDC) | 160 | 200 | 250 | 350 | 400 | 450 |
|------------------|-----------------------------------|-----------|-----------|-----------|-----------|-----------|
| C_R (μ F) | Case dimensions $d \times l$ (mm) | | | | | |
| 0,47 | 6,3 × 11 | 6,3 × 11 | 6,3 × 11 | 6,3 × 11 | | |
| 1,0 | 6,3 × 11 | 6,3 × 11 | 6,3 × 11 | 6,3 × 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 | 8 × 11 | 8 × 11 | 10 × 12,5 | 10 × 12,5 | 10 × 16 | 10 × 20 |
| 10 | 10 × 12,5 | 10 × 12,5 | 10 × 16 | 10 × 20 | 10 × 20 | 12,5 × 25 |
| 22 | 10 × 16 | 10 × 20 | 10 × 20 | 12,5 × 25 | 16 × 20 | 16 × 25 |
| 33 | 10 × 20 | 10 × 20 | 12,5 × 25 | 16 × 25 | 16 × 25 | 16 × 31,5 |
| 47 | 12,5 × 25 | 12,5 × 25 | 16 × 20 | 16 × 31,5 | 16 × 31,5 | 18 × 31,5 |
| 100 | 16 × 25 | 16 × 25 | 18 × 35 | 20 × 30 | 20 × 35 | 20 × 40 |
| 220 | 18 × 31,5 | 18 × 35 | 18 × 40 | | | |
| 330 | 20 × 30 | 22 × 35 | 22 × 40 | | | |
| 470 | 22 × 35 | | | | | |

Other capacitance and voltage ratings are available upon request.


B41851 / B43851
Standard Series – 105 °C
Technical data and ordering codes

| U_R | C_R | Case dimensions | $I_{L, \max}$ | $\tan \delta_{\max}$ | ESR_{\max} | $I_{\sim R}$ | Ordering code ¹⁾ |
|---------------|-----------------|-----------------|----------------|----------------------|-----------------|------------------|-----------------------------|
| | 120 Hz 20 °C | $d \times l$ | 5 min 20 °C | 120 Hz 20 °C | 120 Hz 20 °C | 120 Hz 105 °C | |
| VDC | μF | mm | μA | | Ω | mA | |
| B41851 | | | | | | | |
| 6,3 | 220 | 6,3 × 11 | 14 | 0,28 | 2,1 | 133 | B41851A2227M00* |
| | 330 | 6,3 × 11 | 21 | 0,28 | 1,4 | 189 | B41851A2337M00* |
| | 470 | 8 × 11 | 30 | 0,28 | 1,0 | 231 | B41851A2477M00* |
| | 1 000 | 10 × 12,5 | 63 | 0,28 | 0,46 | 392 | B41851A2108M00* |
| | 2 200 | 10 × 20 | 139 | 0,30 | 0,23 | 665 | B41851A2228M00* |
| | 3 300 | 10 × 20 | 208 | 0,32 | 0,16 | 735 | B41851A2338M00* |
| | 4 700 | 12,5 × 25 | 296 | 0,34 | 0,12 | 910 | B41851A2478M00* |
| 10 | 100 | 5 × 11 | 10 | 0,24 | 4,0 | 84 | B41851A3107M00* |
| | 220 | 6,3 × 11 | 22 | 0,24 | 1,8 | 154 | B41851A3227M00* |
| | 330 | 8 × 11 | 33 | 0,24 | 1,2 | 196 | B41851A3337M00* |
| | 470 | 8 × 11 | 47 | 0,24 | 0,85 | 280 | B41851A3477M00* |
| | 1 000 | 10 × 12,5 | 100 | 0,24 | 0,40 | 448 | B41851A3108M00* |
| | 2 200 | 10 × 20 | 220 | 0,26 | 0,20 | 728 | B41851A3228M00* |
| | 3 300 | 12,5 × 25 | 330 | 0,28 | 0,14 | 1 015 | B41851A3338M00* |
| | 4 700 | 16 × 20 | 470 | 0,30 | 0,11 | 1 078 | B41851A3478M00* |
| 10 000 | 18 × 35 | 1 000 | 0,42 | 0,07 | 1 764 | B41851A3109M00* | |
| 16 | 100 | 5 × 11 | 16 | 0,20 | 3,3 | 112 | B41851A4107M00* |
| | 220 | 6,3 × 11 | 35 | 0,20 | 1,5 | 180 | B41851F4227M00* |
| | 330 | 8 × 11 | 53 | 0,20 | 1,0 | 245 | B41851A4337M00* |
| | 470 | 10 × 12,5 | 75 | 0,20 | 0,71 | 350 | B41851A4477M00* |
| | 1 000 | 10 × 16 | 160 | 0,20 | 0,33 | 504 | B41851A4108M00* |
| | 2 200 | 12,5 × 25 | 352 | 0,22 | 0,17 | 950 | B41851A4228M00* |
| | 3 300 | 16 × 25 | 528 | 0,24 | 0,12 | 1 106 | B41851A4338M00* |
| | 4 700 | 16 × 25 | 752 | 0,26 | 0,09 | 1 190 | B41851A4478M00* |
| | 10 000 | 20 × 35 | 1 600 | 0,38 | 0,06 | 1 820 | B41851A4109M00* |

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 | C_R 120 Hz 20 °C μF | Case dimensions $d \times l$ mm | $I_{L, \max}$ 5 min 20 °C μA | $\tan \delta_{\max}$ 120 Hz 20 °C | ESR_{\max} 120 Hz 20 °C Ω | I_{-R} 120 Hz 105 °C mA | Ordering code ¹⁾ |
|-------|--------------------------------|--|---------------------------------------|---|--------------------------------------|------------------------------------|-----------------------------|
| 25 | 47 | 5 × 11 | 12 | 0,16 | 5,6 | 70 | B41851A5476M00* |
| | 100 | 6,3 × 11 | 25 | 0,16 | 2,7 | 126 | B41851A5107M00* |
| | 220 | 8 × 11 | 55 | 0,16 | 1,2 | 203 | B41851A5227M00* |
| | 330 | 10 × 12,5 | 83 | 0,16 | 0,80 | 280 | B41851A5337M00* |
| | 470 | 10 × 12,5 | 118 | 0,16 | 0,56 | 380 | B41851F5477M00* |
| | 1 000 | 10 × 20 | 250 | 0,16 | 0,27 | 595 | B41851A5108M00* |
| | 2 200 | 16 × 20 | 550 | 0,18 | 0,14 | 910 | B41851A5228M00* |
| | 3 300 | 16 × 25 | 825 | 0,20 | 0,10 | 1 225 | B41851A5338M00* |
| | 4 700 | 16 × 31,5 | 1 175 | 0,22 | 0,08 | 1 400 | B41851A5478M00* |
| | 10 000 | 22 × 40 | 2 500 | 0,34 | 0,06 | 2 100 | B41851A5109M00* |
| 35 | 33 | 5 × 11 | 12 | 0,14 | 7,0 | 60 | B41851A7336M00* |
| | 47 | 5 × 11 | 16 | 0,14 | 4,9 | 91 | B41851A7476M00* |
| | 100 | 6,3 × 11 | 35 | 0,14 | 2,3 | 150 | B41851F7107M00* |
| | 220 | 10 × 12,5 | 77 | 0,14 | 1,1 | 273 | B41851A7227M00* |
| | 330 | 10 × 12,5 | 116 | 0,14 | 0,70 | 315 | B41851A7337M00* |
| | 470 | 10 × 16 | 165 | 0,14 | 0,49 | 399 | B41851A7477M00* |
| | 1 000 | 12,5 × 20 | 350 | 0,14 | 0,23 | 810 | B41851F7108M00* |
| | 1 000 | 12,5 × 25 | 350 | 0,14 | 0,23 | 850 | B41851A7108M00* |
| | 2 200 | 16 × 31,5 | 770 | 0,16 | 0,12 | 1 050 | B41851A7228M00* |
| | 3 300 | 18 × 31,5 | 1 155 | 0,18 | 0,09 | 1 505 | B41851A7338M00* |
| 4 700 | 18 × 40 | 1 645 | 0,20 | 0,07 | 1 610 | B41851A7478M00* | |
| 50 | 1 | 5 × 11 | 4 | 0,12 | 199 | 12 | B41851A6105M00* |
| | 2,2 | 5 × 11 | 4 | 0,12 | 90 | 20 | B41851A6225M00* |
| | 3,3 | 5 × 11 | 4 | 0,12 | 60 | 25 | B41851A6335M00* |
| | 4,7 | 5 × 11 | 4 | 0,12 | 42 | 30 | B41851A6475M00* |
| | 10 | 5 × 11 | 5 | 0,12 | 20 | 40 | B41851A6106M00* |
| | 22 | 5 × 11 | 11 | 0,12 | 9,0 | 63 | B41851A6226M00* |
| | 33 | 6,3 × 11 | 17 | 0,12 | 6,0 | 77 | B41851A6336M00* |
| | 47 | 6,3 × 11 | 24 | 0,12 | 4,2 | 105 | B41851A6476M00* |
| | 100 | 8 × 11 | 50 | 0,12 | 2,0 | 175 | B41851A6107M00* |
| | 220 | 10 × 12,5 | 110 | 0,12 | 0,90 | 280 | B41851A6227M00* |
| 330 | 10 × 16 | 165 | 0,12 | 0,60 | 357 | B41851A6337M00* | |

* Preferred types

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


B41851 / B43851
Standard Series – 105 °C
Technical data and ordering codes

| U_R | C_R 120 Hz 20 °C μF | Case dimensions $d \times l$ mm | $I_{L, \text{max}}$ 5 min 20 °C μA | $\tan \delta_{\text{max}}$ 120 Hz 20 °C | ESR_{max} 120 Hz 20 °C Ω | $I_{\sim R}$ 120 Hz 105 °C mA | Ordering code ¹⁾ |
|-------|---|--|--|---|---|--|-----------------------------|
| 50 | 470 | 10 × 20 | 235 | 0,12 | 0,42 | 490 | B41851A6477M00* |
| | 1 000 | 16 × 20 | 500 | 0,12 | 0,20 | 770 | B41851A6108M00* |
| | 2 200 | 18 × 35 | 1 100 | 0,14 | 0,11 | 1 190 | B41851A6228M00* |
| | 3 300 | 18 × 40 | 1 650 | 0,16 | 0,08 | 1 330 | B41851A6338M00* |
| | 4 700 | 22 × 40 | 2 350 | 0,18 | 0,06 | 1 540 | B41851A6478M00* |
| 63 | 10 | 5 × 11 | 6,3 | 0,12 | 20 | 42 | B41851A8106M00* |
| | 22 | 6,3 × 11 | 14 | 0,12 | 9,0 | 77 | B41851A8226M00* |
| | 33 | 6,3 × 11 | 21 | 0,12 | 6,0 | 91 | B41851A8336M00* |
| | 47 | 8 × 11 | 30 | 0,12 | 4,2 | 126 | B41851A8476M00* |
| | 100 | 10 × 12,5 | 63 | 0,12 | 2,0 | 203 | B41851A8107M00* |
| | 220 | 10 × 16 | 139 | 0,12 | 0,90 | 329 | B41851A8227M00* |
| | 330 | 10 × 20 | 208 | 0,12 | 0,60 | 434 | B41851A8337M00* |
| | 470 | 12,5 × 25 | 296 | 0,12 | 0,42 | 630 | B41851A8477M00* |
| | 1 000 | 16 × 31,5 | 630 | 0,12 | 0,20 | 1 050 | B41851A8108M00* |
| | 2 200 | 20 × 40 | 1 386 | 0,14 | 0,11 | 1 540 | B41851A8228M00* |
| 100 | 0,10 | 5 × 11 | 3,0 | 0,10 | 1 658 | 1,4 | B41851A9104M00* |
| | 0,22 | 5 × 11 | 3,0 | 0,10 | 754 | 2,8 | B41851A9224M00* |
| | 0,33 | 5 × 11 | 3,0 | 0,10 | 502 | 4,9 | B41851A9334M00* |
| | 0,47 | 5 × 11 | 3,0 | 0,10 | 353 | 7,0 | B41851A9474M00* |
| | 1 | 5 × 11 | 3,0 | 0,10 | 166 | 14 | B41851A9105M00* |
| | 2,2 | 5 × 11 | 3,0 | 0,10 | 75 | 21 | B41851A9225M00* |
| | 3,3 | 5 × 11 | 3,3 | 0,10 | 50 | 28 | B41851A9335M00* |
| | 4,7 | 5 × 11 | 4,7 | 0,10 | 35 | 31 | B41851A9475M00* |
| | 10 | 6,3 × 11 | 10 | 0,10 | 17 | 52 | B41851A9106M00* |
| | 22 | 8 × 11 | 22 | 0,10 | 7,5 | 91 | B41851A9226M00* |
| | 33 | 10 × 12,5 | 33 | 0,10 | 5,0 | 133 | B41851A9336M00* |
| | 47 | 10 × 12,5 | 47 | 0,10 | 3,5 | 161 | B41851B9476M00* |
| | 100 | 10 × 20 | 100 | 0,10 | 1,7 | 245 | B41851A9107M00* |
| | 220 | 12,5 × 25 | 220 | 0,10 | 0,75 | 434 | B41851A9227M00* |
| | 330 | 16 × 25 | 330 | 0,10 | 0,50 | 560 | B41851A9337M00* |
| | 470 | 16 × 31,5 | 470 | 0,10 | 0,35 | 630 | B41851A9477M00* |
| 1 000 | 20 × 40 | 1 000 | 0,10 | 0,17 | 910 | B41851A9108M00* | |

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 | C_R | Case dimensions | $I_{L, \max}$ | $\tan \delta_{\max}$ | ESR_{\max} | $I_{\sim R}$ | Ordering code ¹⁾ |
|-------|----------------------------------|--------------------|---------------------------------|----------------------|-----------------------------|------------------------|-----------------------------|
| VDC | 120 Hz 20 °C μF | $d \times l$ mm | 5 min 20 °C μA | 120 Hz 20 °C | 120 Hz 20 °C Ω | 120 Hz 105 °C mA | |

B43851

| | | | | | | | | |
|-----|---------|-----------|-----------|------|------|-----------------|-----------------|-----------------|
| 160 | 0,47 | 6,3 × 11 | 17 | 0,20 | 705 | 9,8 | B43851A1474M00* | |
| | 1,0 | 6,3 × 11 | 20 | 0,20 | 332 | 15 | B43851A1105M00* | |
| | 2,2 | 6,3 × 11 | 26 | 0,20 | 151 | 28 | B43851A1225M00* | |
| | 3,3 | 6,3 × 11 | 31 | 0,20 | 100 | 32 | B43851A1335M00* | |
| | 4,7 | 8 × 11 | 38 | 0,20 | 71 | 39 | B43851A1475M00* | |
| | 10 | 10 × 12,5 | 63 | 0,20 | 33 | 60 | B43851A1106M00* | |
| | 22 | 10 × 16 | 121 | 0,20 | 15 | 91 | B43851A1226M00* | |
| | 33 | 10 × 20 | 173 | 0,20 | 10 | 123 | B43851A1336M00* | |
| | 47 | 12,5 × 25 | 241 | 0,20 | 7,1 | 182 | B43851A1476M00* | |
| | 100 | 16 × 25 | 495 | 0,20 | 3,3 | 287 | B43851A1107M00* | |
| | 220 | 18 × 31,5 | 1 071 | 0,20 | 1,5 | 462 | B43851A1227M00* | |
| 200 | 330 | 20 × 30 | 1 599 | 0,20 | 1,0 | 525 | B43851A1337M00* | |
| | 470 | 22 × 35 | 2 271 | 0,20 | 0,71 | 700 | B43851A1477M00* | |
| | 200 | 0,47 | 6,3 × 11 | 18 | 0,20 | 705 | 9 | B43851A2474M00* |
| | | 1,0 | 6,3 × 11 | 21 | 0,20 | 332 | 15 | B43851A2105M00* |
| | | 2,2 | 6,3 × 11 | 28 | 0,20 | 151 | 28 | B43851A2225M00* |
| | | 3,3 | 6,3 × 11 | 35 | 0,20 | 100 | 32 | B43851A2335M00* |
| | | 4,7 | 8 × 11 | 43 | 0,20 | 71 | 39 | B43851A2475M00* |
| | | 10 | 10 × 12,5 | 75 | 0,20 | 33 | 56 | B43851B2106M00* |
| | | 22 | 10 × 20 | 147 | 0,20 | 15 | 98 | B43851A2226M00* |
| | | 33 | 10 × 20 | 213 | 0,20 | 10 | 109 | B43851B2336M00* |
| | | 47 | 12,5 × 25 | 297 | 0,20 | 7,1 | 175 | B43851A2476M00* |
| 100 | | 16 × 25 | 615 | 0,20 | 3,3 | 287 | B43851A2107M00* | |
| 220 | | 18 × 35 | 1 335 | 0,20 | 1,5 | 700 | B43851A2227M00* | |
| 330 | 22 × 35 | 1 995 | 0,20 | 1,0 | 840 | B43851A2337M00* | | |

Preferred types

1) * = "0" for bulk version.

For taping versions, other lead configurations and packing information see page 503.


B41851 / B43851
Standard Series – 105 °C
Technical data and ordering codes

| U_R | C_R 120 Hz 20 °C μF | Case dimensions $d \times l$ mm | $I_{L, \text{max}}$ 5 min 20 °C μA | $\tan \delta_{\text{max}}$ 120 Hz 20 °C | ESR_{max} 120 Hz 20 °C Ω | $I_{\sim R}$ 120 Hz 105 °C mA | Ordering code ¹⁾ |
|-------|---|--|--|---|---|--|-----------------------------|
| 250 | 0,47 | 6,3 × 11 | 19 | 0,20 | 705 | 8 | B43851F2474M00* |
| | 1,0 | 6,3 × 11 | 23 | 0,20 | 332 | 15 | B43851F2105M00* |
| | 2,2 | 6,3 × 11 | 32 | 0,20 | 151 | 32 | B43851F2225M00* |
| | 3,3 | 8 × 11 | 40 | 0,20 | 100 | 35 | B43851F2335M00* |
| | 4,7 | 10 × 12,5 | 50 | 0,20 | 71 | 49 | B43851F2475M00* |
| | 10 | 10 × 16 | 90 | 0,20 | 33 | 63 | B43851F2106M00* |
| | 22 | 10 × 20 | 180 | 0,20 | 15 | 102 | B43851F2226M00* |
| | 33 | 12,5 × 25 | 263 | 0,20 | 10 | 151 | B43851F2336M00* |
| | 47 | 16 × 20 | 368 | 0,20 | 7,1 | 210 | B43851F2476M00* |
| | 100 | 18 × 35 | 765 | 0,20 | 3,3 | 490 | B43851F2107M00* |
| 220 | 18 × 40 | 1 665 | 0,20 | 1,5 | 700 | B43851F2227M00* | |
| 330 | 22 × 40 | 2 490 | 0,20 | 1,0 | 840 | B43851F2337M00* | |
| 350 | 0,47 | 6,3 × 11 | 20 | 0,20 | 705 | 8 | B43851A4474M00* |
| | 1,0 | 6,3 × 11 | 26 | 0,20 | 332 | 15 | B43851A4105M00* |
| | 2,2 | 8 × 11 | 38 | 0,20 | 151 | 21 | B43851A4225M00* |
| | 3,3 | 10 × 12,5 | 50 | 0,20 | 100 | 32 | B43851A4335M00* |
| | 4,7 | 10 × 12,5 | 64 | 0,20 | 71 | 39 | B43851A4475M00* |
| | 10 | 10 × 20 | 120 | 0,20 | 33 | 67 | B43851A4106M00* |
| | 22 | 12,5 × 25 | 246 | 0,20 | 15 | 123 | B43851A4226M00* |
| | 33 | 16 × 25 | 362 | 0,20 | 10 | 168 | B43851A4336M00* |
| | 47 | 16 × 31,5 | 509 | 0,20 | 7,1 | 224 | B43851A4476M00* |
| | 100 | 20 × 30 | 1 065 | 0,20 | 3,3 | 420 | B43851A4107M00* |
| 400 | 2,2 | 10 × 12,5 | 41 | 0,20 | 151 | 28 | B43851A9225M00* |
| | 3,3 | 10 × 12,5 | 55 | 0,20 | 100 | 32 | B43851A9335M00* |
| | 4,7 | 10 × 16 | 71 | 0,20 | 71 | 42 | B43851A9475M00* |
| | 10 | 10 × 20 | 135 | 0,20 | 33 | 67 | B43851A9106M00* |
| | 22 | 16 × 20 | 279 | 0,20 | 15 | 126 | B43851A9226M00* |
| | 33 | 16 × 25 | 411 | 0,20 | 10 | 168 | B43851A9336M00* |
| | 47 | 16 × 31,5 | 579 | 0,20 | 7,1 | 217 | B43851A9476M00* |
| | 100 | 20 × 35 | 1 215 | 0,20 | 3,3 | 420 | B43851A9107M00* |

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 | C_R | Case dimensions | $I_{L, \max}$ | $\tan \delta_{\max}$ | ESR_{\max} | $I_{\sim R}$ | Ordering code ¹⁾ |
|-------|----------------------------------|--------------------|---------------------------------|----------------------|-----------------------------|------------------------|-----------------------------|
| VDC | 120 Hz 20 °C μF | $d \times l$ mm | 5 min 20 °C μA | 120 Hz 20 °C | 120 Hz 20 °C Ω | 120 Hz 105 °C mA | |
| 450 | 2,2 | 10 × 12,5 | 45 | 0,20 | 151 | 20 | B43851A5225M00* |
| | 3,3 | 10 × 16 | 60 | 0,20 | 100 | 31 | B43851A5335M00* |
| | 4,7 | 10 × 20 | 78 | 0,20 | 71 | 35 | B43851A5475M00* |
| | 10 | 12,5 × 25 | 150 | 0,20 | 33 | 63 | B43851A5106M00* |
| | 22 | 16 × 25 | 312 | 0,20 | 15 | 116 | B43851A5226M00* |
| | 33 | 16 × 31,5 | 460 | 0,20 | 10 | 154 | B43851A5336M00* |
| | 47 | 18 × 31,5 | 650 | 0,20 | 7,1 | 186 | B43851A5476M00* |
| | 100 | 20 × 40 | 1 365 | 0,20 | 3,3 | 420 | B43851A5107M00* |

1) * = "0" for bulk version.

For taping versions, other lead configurations and packing information see page 503.



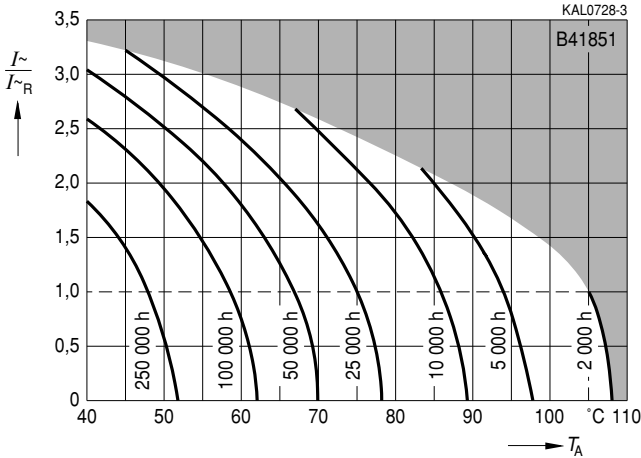
B41851 / B43851

Standard Series – 105 °C

Useful life

depending on ambient temperature T_A under ripple current operating conditions¹⁾

$U_R = 6,3 \dots 100 \text{ VDC}$



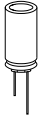
Useful life

depending on ambient temperature T_A under ripple current operating conditions¹⁾

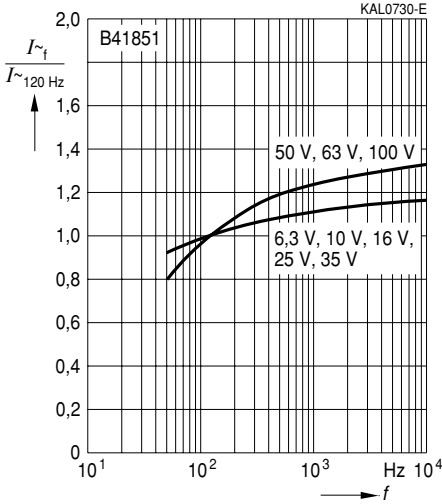
$U_R = 160 \dots 450 \text{ VDC}$



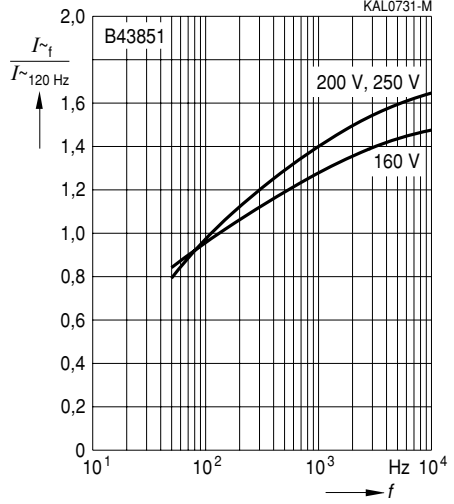
1) Refer to page 40 for an explanation on how to interpret the useful life graphs.



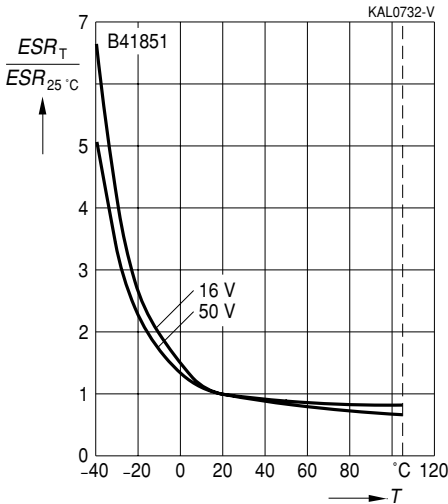
Frequency factor of permissible ripple current I_{\sim} versus frequency f
 $U_R \leq 100$ VDC



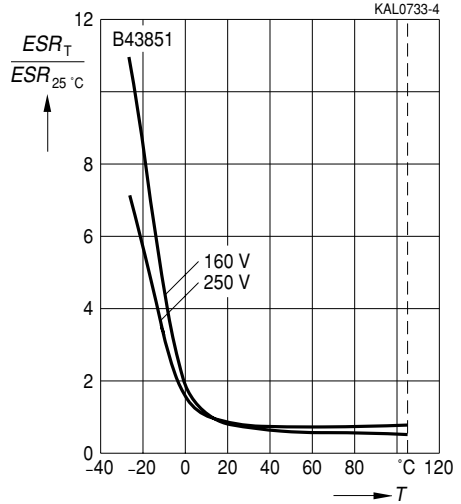
Frequency factor of permissible ripple current I_{\sim} versus frequency f
 $U_R \geq 160$ VDC

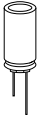


Equivalent series resistance ESR at $f = 120$ Hz versus temperature T
 Typical behavior
 $U_R \leq 100$ VDC



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

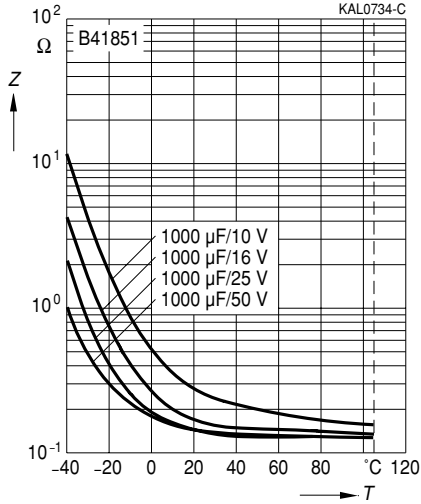




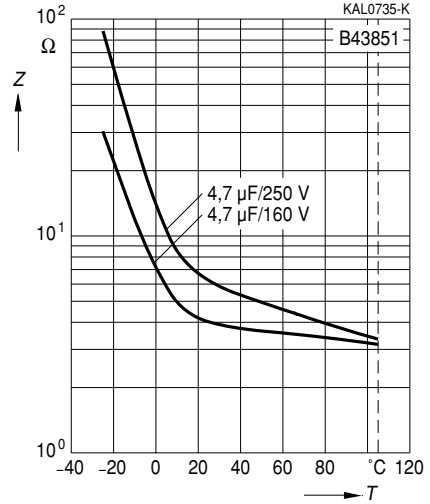
B41851 / B43851

Standard Series – 105 °C

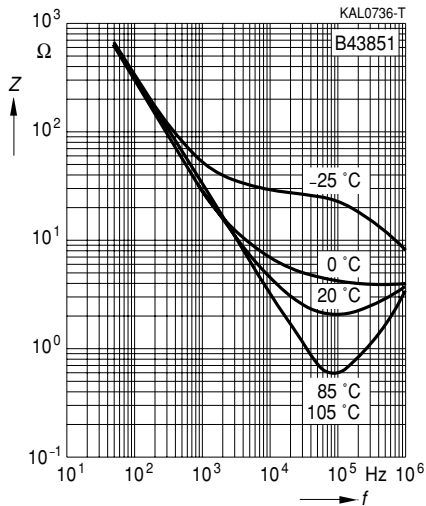
Impedance Z at $f = 10$ kHz
 versus temperature T
 Typical behavior
 $U_R \leq 100$ VDC



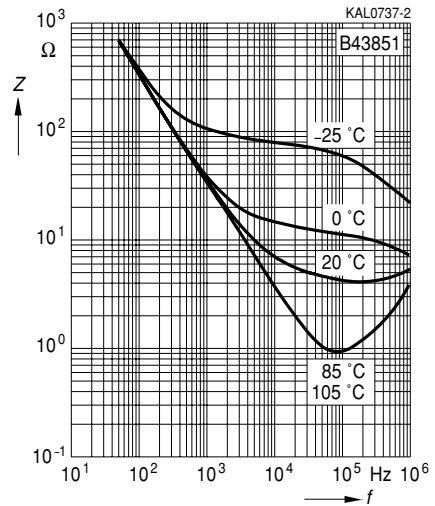
Impedance Z at $f = 10$ kHz
 versus temperature T
 Typical behavior
 $U_R \geq 160$ VDC



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



Impedance Z
 versus frequency f and temperature T
 for 10 μ F/160 VDC
 Typical behavior

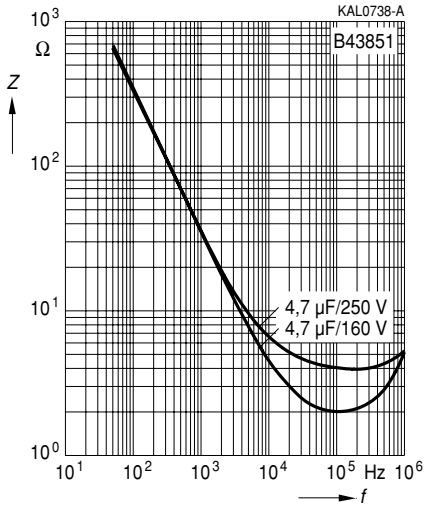




Impedance Z

versus frequency f

Typical behavior at 20 °C



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