

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

### Construction

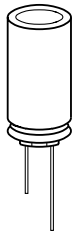
- Radial leads
- Charge-discharge proof, polar
- Aluminum case with insulating sleeve
- Minus pole marking on the insulating sleeve
- Stand off rubber seal
- Case with safety vent from diameter 6,3 mm

### Delivery mode

Special terminal configurations and packing:

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

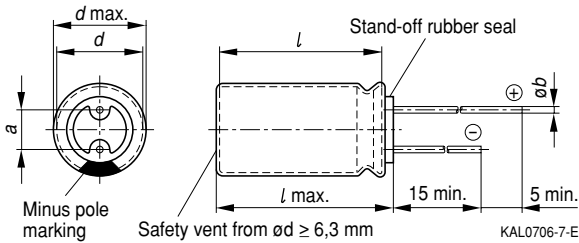
Refer to page 503 for further details and ordering example.



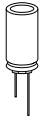
KAL0707-F


**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 $U_S$                   | $1,15 \cdot U_R$   | $1,1 \cdot U_R$                 |
| Rated capacitance $C_R$               | 0,1 ... 10 000 $\mu\text{F}$   | 0,47 ... 560 $\mu\text{F}$      |
| Capacitance tolerance                 | $\pm 20 \% \triangleq \text{M}$  | $\pm 20 \% \triangleq \text{M}$ |
| Useful life                           |  |                                 |
| 85 °C; $U_R$ ; $I_{\sim R}$           | > 2 000 h  | > 3 000 h                       |
| 40 °C; $U_R$ ; $1,3 \cdot I_{\sim R}$ | > 100 000 h  | —                               |
| 40 °C; $U_R$ ; $1,6 \cdot I_{\sim R}$ | —  | > 100 000 h                     |
| Requirements:                         | $\Delta C/C \leq \pm 45 \%$ of initial value<br>$\tan \delta \leq 3$ times initial specified limit<br>$I_L \leq$ initial specified limit<br>Failure percentage: $\leq 1 \%$<br>Failure rate: $\leq 100$ fit ( $\leq 100 \cdot 10^{-9}/\text{h}$ )<br>(for definition "fit", refer to chapter "Quality", page 62) |                                 |
| Voltage endurance test                |  |                                 |
| 85 °C; $U_R$                          | 2 000 h  | 2 000 h                         |
| Post test requirements:               | $\Delta C/C \leq \pm 30 \%$ of initial value<br>$\tan \delta \leq 2$ times initial specified limit<br>$I_L \leq$ initial specified limit   |                                 |
| Vibration resistance                  | To IEC 60068-2, test Fc:<br>displacement amplitude 0,75 mm, frequency range 10 ... 2000 Hz,<br>acceleration max. 10 g, duration $3 \times 2$ h   |                                 |
| IEC climatic category                 | To IEC 60068-1:<br>$U_R \leq 250$ V: 40/085/56 (– 40 °C/+ 85 °C/56 days damp heat test)<br>$U_R \geq 350$ 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 |
|-----------------|--|-------------|-------------|----------------|
| $d \times l$    | $d_{\text{max}} \times l_{\text{max}}$ | $a \pm 0,5$ | $b$         | 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             |

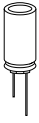

**B41821 / B43821**
**Standard Series – 85 °C**
**Overview of available types**
**B41821**

| $U_R$ (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<br>16,0 × 20 | 16 × 25   | 18 × 35   | 18 × 40<br>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       |
|------------------|-----------------------------------|-----------|------------------------|-----------|----------------------|-----------|
| $C_R$ ( $\mu$ F) | 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<br>16 × 20 | 16 × 25   |
| 33               | 10 × 20                           | 10 × 20   | 12,5 × 20<br>12,5 × 25 | 16 × 25   | 16 × 25              | 16 × 31,5 |
| 47               | 12,5 × 25                         | 12,5 × 25 | 12,5 × 25<br>16 × 20   | 16 × 25   | 16 × 31,5            | 18 × 31,5 |
| 68               | 12,5 × 25<br>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.


**B41821 / B43821**
**Standard Series – 85 °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 <sup>1)</sup>   |
|---------------|----------------------------------|--------------------|---------------------------------|----------------------|-----------------------------|-------------------------------|-------------------------------|
| VDC           | 120 Hz<br>20 °C<br>$\mu\text{F}$ | $d \times l$<br>mm | 5 min<br>20 °C<br>$\mu\text{A}$ | 120 Hz<br>20 °C      | 120 Hz<br>20 °C<br>$\Omega$ | 120 Hz<br>85 °C<br>mA         |                               |
| <b>B41821</b> |                                  |                    |                                 |                      |                             |                               |                               |
| 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* <sup>2)</sup> |
| 4 700         | 12,5 × 25                        | 296                | 0,34                            | 0,12                 | 1 300                       | B41821A2478M00* <sup>2)</sup> |                               |
| 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* <sup>2)</sup> |
|               | 6 800                            | 16 × 31,5          | 680                             | 0,34                 | 0,08                        | 2 110                         | B41821A3688M00* <sup>2)</sup> |
| 8 200         | 18 × 31,5                        | 820                | 0,38                            | 0,08                 | 2 310                       | B41821A3828M00* <sup>2)</sup> |                               |
| 10 000        | 18 × 35                          | 1 000              | 0,42                            | 0,07                 | 2 520                       | B41821A3109M00* <sup>2)</sup> |                               |

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**

| $U_R$<br>VDC | $C_R$<br>120 Hz<br>20 °C<br>$\mu\text{F}$ | Case<br>dimensions<br>$d \times l$<br>mm | $I_{L, \text{max}}$<br>5 min<br>20 °C<br>$\mu\text{A}$ | $\tan \delta_{\text{max}}$<br>120 Hz<br>20 °C | $ESR_{\text{max}}$<br>120 Hz<br>20 °C<br>$\Omega$ | $I_{\sim R}$<br>120 Hz<br>85 °C<br>mA | Ordering code <sup>1)</sup>   |
|--------------|---|--|--|---|---|---------------------------------------|-------------------------------|
| 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* <sup>2)</sup> |
|              | 6 800                                     | 18 × 31,5                                | 1 088  | 0,30  | 0,07  | 2 250                                 | B41821A4688M00* <sup>2)</sup> |
|              | 8 200                                     | 20 × 30                                  | 1 312  | 0,34  | 0,07  | 2 500                                 | B41821A4828M00* <sup>2)</sup> |
|              | 10 000                                    | 20 × 35                                  | 1 600  | 0,38  | 0,06  | 2 600                                 | B41821A4109M00* <sup>2)</sup> |
| 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**

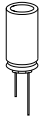
| $U_R$<br>VDC | $C_R$<br>120 Hz<br>20 °C<br>$\mu\text{F}$ | Case<br>dimensions<br>$d \times l$<br>mm | $I_{L, \max}$<br>5 min<br>20 °C<br>$\mu\text{A}$ | $\tan \delta_{\max}$<br>120 Hz<br>20 °C | $ESR_{\max}$<br>120 Hz<br>20 °C<br>$\Omega$ | $I_{\sim R}$<br>120 Hz<br>85 °C<br>mA | Ordering code <sup>1)</sup> |
|--------------|---|--|--|---|---|---------------------------------------|-----------------------------|
| 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.



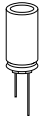

**Technical data and ordering codes**

| $U_R$ | $C_R$                      | Case dimensions    | $I_{L, \max}$             | $\tan \delta_{\max}$ | $ESR_{\max}$                | $I_{\sim R}$          | Ordering code <sup>1)</sup> |
|-------|----------------------------|--------------------|---------------------------|----------------------|-----------------------------|-----------------------|-----------------------------|
| VDC   | 120 Hz<br>20 °C<br>$\mu F$ | $d \times l$<br>mm | 5 min<br>20 °C<br>$\mu A$ | 120 Hz<br>20 °C      | 120 Hz<br>20 °C<br>$\Omega$ | 120 Hz<br>85 °C<br>mA |                             |
| 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**

| $U_R$ | $C_R$<br>120 Hz<br>20 °C<br>$\mu\text{F}$ | Case<br>dimensions<br>$d \times l$<br>mm | $I_{L, \text{max}}$<br>5 min<br>20 °C<br>$\mu\text{A}$ | $\tan \delta_{\text{max}}$<br>120 Hz<br>20 °C | $ESR_{\text{max}}$<br>120 Hz<br>20 °C<br>$\Omega$ | $I_{\sim R}$<br>120 Hz<br>85 °C<br>mA | Ordering code <sup>1)</sup> |
|-------|---|--|--|---|---|---------------------------------------|-----------------------------|
| VDC   | 100                                       | 5 × 11                                   | 3,0  | 0,10  | 1 658   | 2,0                                   | B41821A9104M00*             |
|       | 0,10                                      | 5 × 11                                   | 3,0  | 0,10  | 754   | 4,0                                   | B41821A9224M00*             |
|       | 0,22                                      | 5 × 11                                   | 3,0  | 0,10  | 502   | 7,0                                   | B41821A9334M00*             |
|       | 0,33                                      | 5 × 11                                   | 3,0  | 0,10  | 353   | 10                                    | B41821A9474M00*             |
|       | 0,47                                      | 5 × 11                                   | 3,0  | 0,10  | 244   | 13                                    | B41821A9684M00*             |
|       | 0,68                                      | 5 × 11                                   | 3,0  | 0,10  | 166   | 21                                    | B41821A9105M00*             |
|       | 1,0                                       | 5 × 11                                   | 3,0  | 0,10  | 111   | 24                                    | B41821A9155M00*             |
|       | 1,5                                       | 5 × 11                                   | 3,0  | 0,10  | 75  | 30                                    | B41821A9225M00*             |
|       | 2,2                                       | 5 × 11                                   | 3,0  | 0,10  | 50  | 40                                    | B41821A9335M00*             |
|       | 3,3                                       | 5 × 11                                   | 3,3  | 0,10  | 35  | 45                                    | B41821A9475M00*             |
|       | 4,7                                       | 5 × 11                                   | 4,7  | 0,10  | 17  | 75                                    | B41821A9106M00*             |
|       | 10  | 6,3 × 11                                 | 10   | 0,10  |   |                                       |                             |
|       | 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**

| $U_R$ | $C_R$                      | Case dimensions    | $I_{L, \max}$<br>5 min | $\tan \delta_{\max}$<br>120 Hz | $ESR_{\max}$<br>120 Hz | $I_{\sim R}$<br>120 Hz | Ordering code <sup>1)</sup> |
|-------|----------------------------|--------------------|------------------------|--------------------------------|------------------------|------------------------|-----------------------------|
| VDC   | 120 Hz<br>20 °C<br>$\mu F$ | $d \times l$<br>mm | 20 °C<br>$\mu A$       | 20 °C                          | 20 °C<br>$\Omega$      | 85 °C<br>mA            |                             |

**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.


**B41821 / B43821**
**Standard Series – 85 °C**
**Technical data and ordering codes**

| $U_R$ | $C_R$                      | Case dimensions    | $I_{L,max}$               | $\tan \delta_{max}$ | $ESR_{max}$                 | $I_{-R}$              | Ordering code <sup>1)</sup> |
|-------|----------------------------|--------------------|---------------------------|---------------------|-----------------------------|-----------------------|-----------------------------|
| VDC   | 120 Hz<br>20 °C<br>$\mu F$ | $d \times l$<br>mm | 5 min<br>20 °C<br>$\mu A$ | 120 Hz<br>20 °C     | 120 Hz<br>20 °C<br>$\Omega$ | 120 Hz<br>85 °C<br>mA |                             |
| 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.

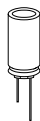
For taping versions, other lead configurations and packing information see page 503.


**Technical data and ordering codes**

| $U_R$ | $C_R$                            | Case dimensions    | $I_{L, \max}$                   | $\tan \delta_{\max}$ | $ESR_{\max}$                | $I_{\sim R}$          | Ordering code <sup>1)</sup> |
|-------|----------------------------------|--------------------|---------------------------------|----------------------|-----------------------------|-----------------------|-----------------------------|
| VDC   | 120 Hz<br>20 °C<br>$\mu\text{F}$ | $d \times l$<br>mm | 5 min<br>20 °C<br>$\mu\text{A}$ | 120 Hz<br>20 °C      | 120 Hz<br>20 °C<br>$\Omega$ | 120 Hz<br>85 °C<br>mA |                             |
| 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**

| $U_R$      | $C_R$<br>120 Hz<br>20 °C<br>μF | Case<br>dimensions<br>$d \times l$<br>mm | $I_{L, \max}$<br>5 min<br>20 °C<br>μA | $\tan \delta_{\max}$<br>120 Hz<br>20 °C | $ESR_{\max}$<br>120 Hz<br>20 °C<br>Ω | $I_{\sim R}$<br>120 Hz<br>85 °C<br>mA | Ordering code <sup>1)</sup> |
|------------|--------------------------------|--|---------------------------------------|---|--------------------------------------|---------------------------------------|-----------------------------|
| 450<br>VDC | 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.

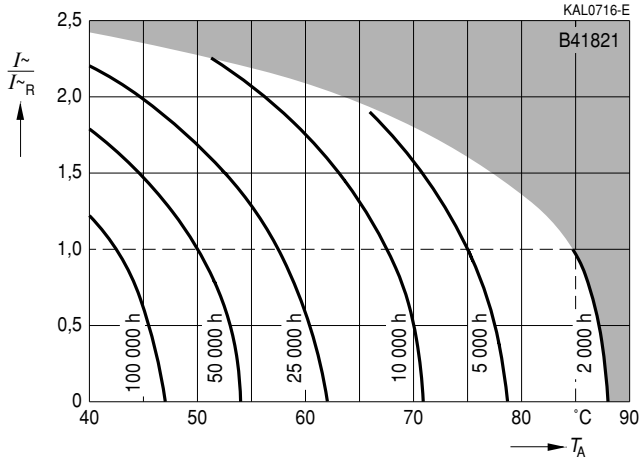
For taping versions, other lead configurations and packing information see page 503.



**Useful life**

depending on ambient temperature  $T_A$  under ripple current operating conditions<sup>1)</sup>

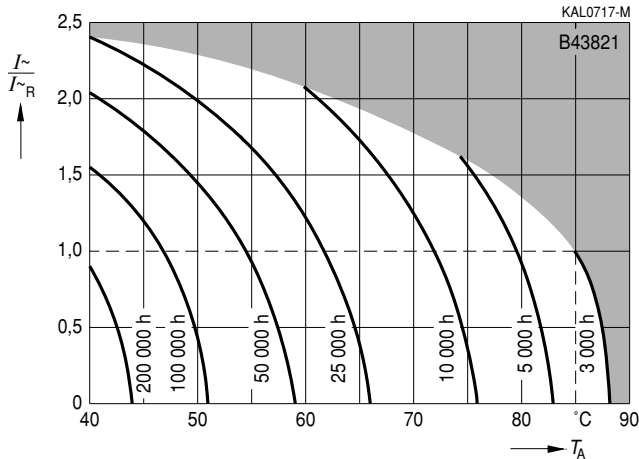
$U_R = 6,3 \dots 100$  VDC



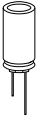
**Useful life**

depending on case temperature  $T_C$  under ripple current operating conditions<sup>1)</sup>

$U_R = 160 \dots 450$  VDC



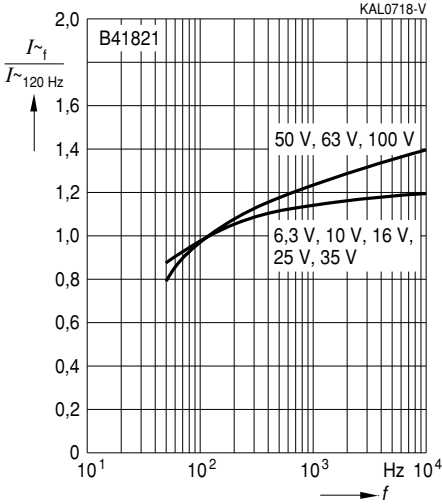
1) Refer to page 40 for an explanation on how to interpret the useful life graphs.



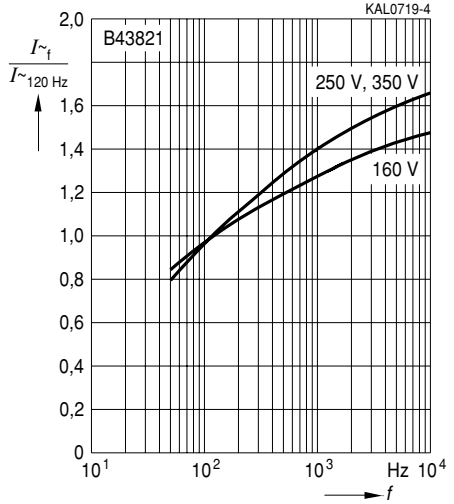
**B41821 / B43821**

**Standard Series – 85 °C**

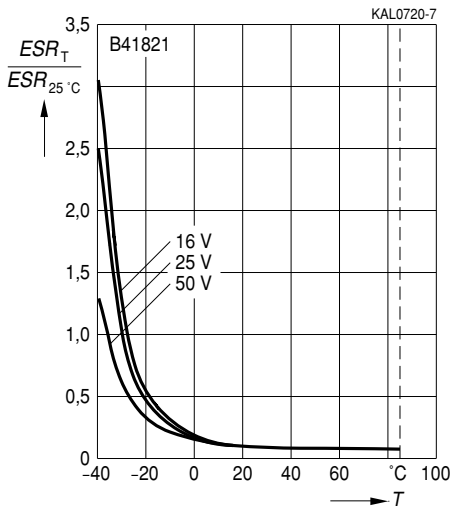
**Frequency factor of permissible ripple current  $I_{\sim}$  versus frequency  $f$**   
 $U_R \leq 100$  VDC



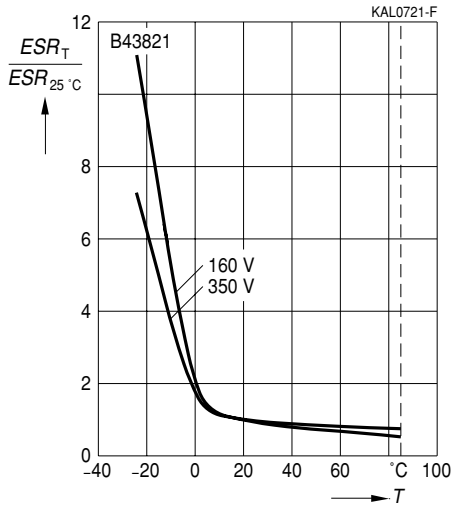
**Frequency factor of permissible ripple current  $I_{\sim}$  versus frequency  $f$**   
 $U_R \geq 160$  VDC



**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







**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





**B41821 / B43821**

**Standard Series – 85 °C**

**Impedance  $Z$**

versus frequency  $f$  and temperature  $T$   
for 4,7  $\mu\text{F}/160$  VDC  
Typical behavior



**Impedance  $Z$**

versus frequency  $f$  and temperature  $T$   
for 4,7  $\mu\text{F}/350$  VDC  
Typical behavior



**Herausgegeben von EPCOS AG**

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