

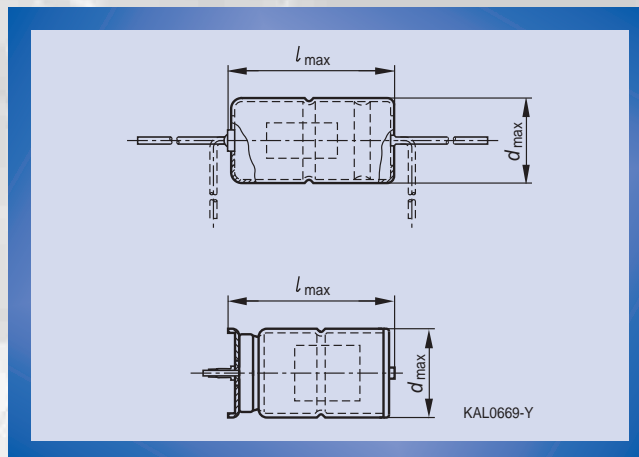
B43693/B43793 (SIKOREL®)

| Specifications and characteristics in brief | | | | Product | | |
|---|--------------------------------------|--|-------------|---------------|---------|----|
| Rated voltage | U_R | 160...250 | | VDC | | |
| Surge voltage | U_S | $1.15 \cdot U_R$ | | V | | |
| Rated capacitance | C_R | 22...100 | | μF | | |
| Capacitance tolerance | ΔC | $-10/+30 \Delta Q$ | | % | | |
| Useful life* | | | | h | | |
| | 40 °C, U_R | 200 000 (1.9 $I_{\sim R, 105^\circ\text{C}}$) | | | | |
| | 85 °C, U_R , $I_{\sim \text{max}}$ | 4 000 | | | | |
| | 105 °C, U_R , $I_{\sim R}$ | 4 000 | | | | |
| | 125 °C, U_R , 0.5 $I_{\sim R}$ | 1 000 | | | | |
| Voltage endurance test | | 2 000, 105 °C, U_R | | h | | |
| Leakage current (5 min, 20 °C) | I_L | $I_L \leq 0.006 \cdot \left(\frac{C_R}{\mu\text{F}} \cdot \frac{U_R}{V} \right) + 4$ | | μA | | |
| Self-inductance | ESL | Diam. d (mm) | 14 | 16 | 18 | nH |
| | | Length l (mm) | approx. ESL | | | |
| | | 25 axial / star | 22 / 6 | 26 / 7 | - / - | |
| | | 30 axial / star | 24 / 7 | 29 / 8 | 34 / 10 | |
| | | 39 axial / star | - / - | 33 / 9 | 38 / 11 | |
| IEC climatic category | | in acc. with IEC 60068-1: 40/125/56 (-40 °C, +125 °C, 56 days damp heat test) | | | | |
| Detail / Sectional spec. | | similar to CECC 30 301-802 / IEC 60384-4 | | | | |
| Vibration resistance | | in acc. with IEC 60068-2-6, test F _c : displacement amplitude 1.5 mm, at 10 Hz to 2 kHz, acceleration max. 20 g, duration 3 x 2 h | | | | |

*Ambient temperatures

Features (axial/solder-star types)

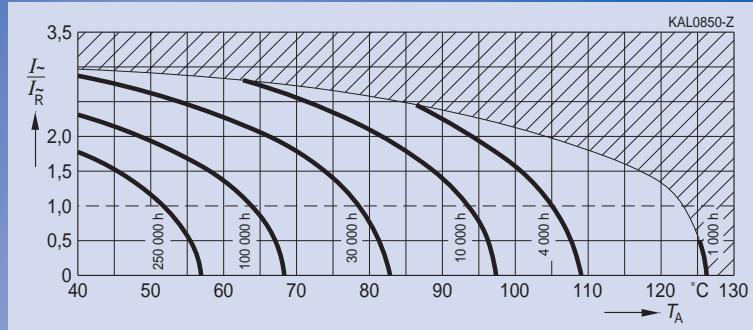
- U_R 160 ... 250 V
- C_R 22 ... 100 μF
- Operating temperature 125 °C
- High ripple current capability
- Long useful life
- High vibration resistance
- Shelf life up to 15 years



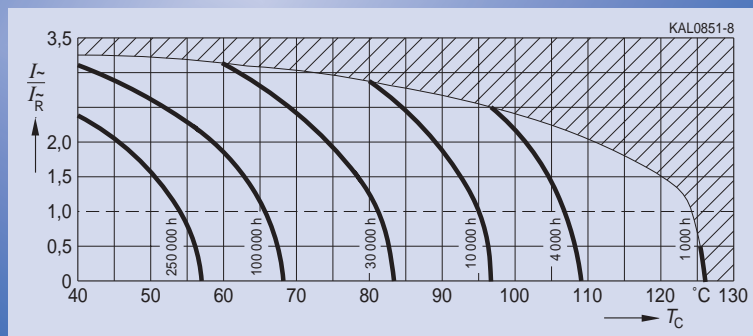
| d x l (mm) | d _{max} x l _{max} (mm) | | Mass (g) | |
|------------|--|-------------|----------|------|
| | axial | star | axial | star |
| 14 x 30 | 14.5 x 30.5 | 15.5 x 32 | 6.8 | 7.2 |
| 16 x 30 | 16.5 x 30.5 | 17.5 x 32 | 8.9 | 9.4 |
| 18 x 30 | 18.5 x 30.5 | 19.5 x 32 | 11.1 | 11.8 |
| 18 x 39 | 18.5 x 40 | 19.5 x 41.5 | 14.7 | 15.4 |

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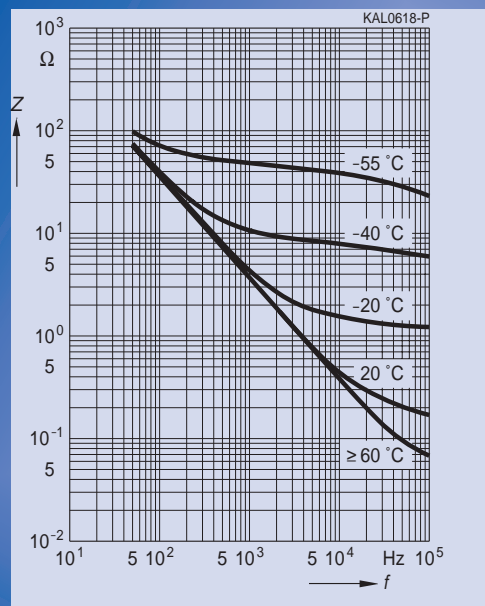
- Useful life depending on ambient temperature T_A under ripple current operating conditions
- Rated voltage U_R applied



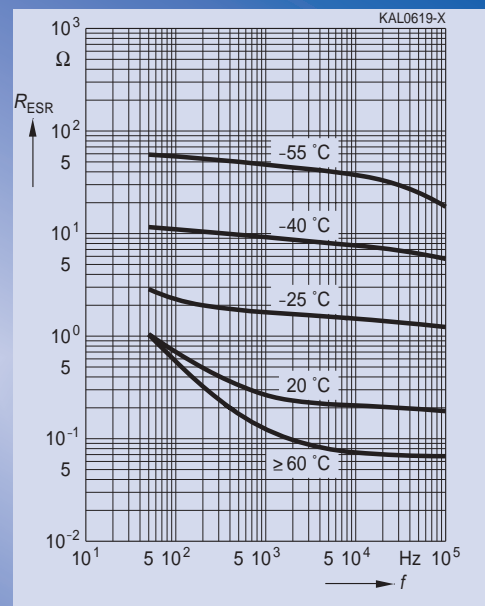
- Useful life depending on case temperature T_C under ripple current operating conditions
- Rated voltage U_R applied



Further relevant technical data are mentioned on page 25 and 26

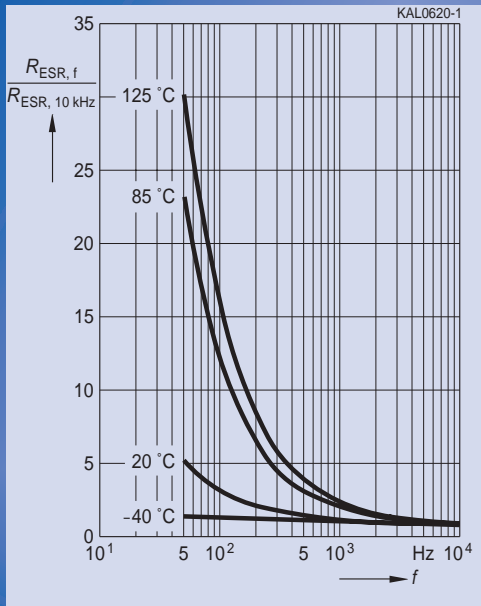


- Impedance Z versus frequency f at different temperatures
- Typical behavior for 47 $\mu\text{F}/250\text{ V}$

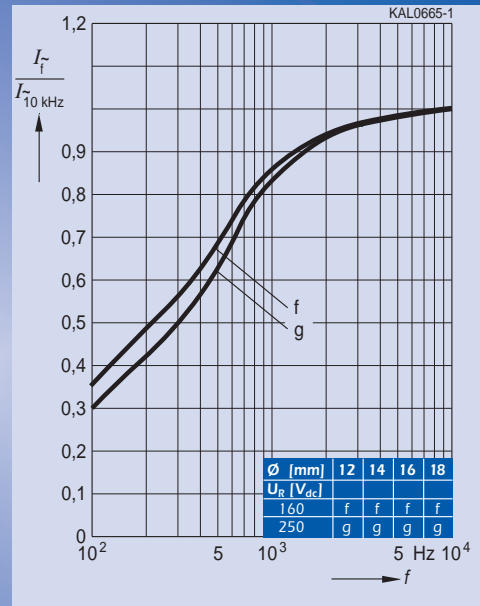


- Equivalent series resistance R_{ESR} versus frequency f at different temperatures
- Typical behavior for 47 $\mu\text{F}/250\text{ V}$

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- Frequency characteristics of R_{ESR} at different temperatures
- Typical behavior



- Frequency factor of permissible ripple current I_r versus frequency f

Further relevant technical data are mentioned on page 25 and 26