



Power Capacitors

The following products presented in this data sheet are being withdrawn.

| Ordering Code | Substitute Product | Date of Withdrawal | Deadline Last Orders | Last Shipments |
|-----------------|--------------------|--------------------|----------------------|----------------|
| B25856K7505K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K7504K013 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K7405K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |

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| B25856K7355K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K7255K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K7205K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K7155K013 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K7105K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K4755K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K4504K013 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K4255K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K4204K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K4105K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K3504K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K3255K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K3104K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K2504K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K2405K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K2305K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K2255K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K2205K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K2204K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K2105K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K1755K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K1505K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K1255K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K1204K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K1155K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K1106K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K0755K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K0405K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K0205K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K0204K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K0156K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K0155K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856K0105K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856J7305J003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |
| B25856J0474K003 | | 2014-08-14 | 2015-03-31 | 2016-09-30 |

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.

Features

- High dielectric strength
- High peak-current capability
- Extremely low inductance

Construction

- Self-healing
- Plastic dielectric
- Oil-impregnated tubular windings (no PCB)
- Metal-sprayed end faces ensure reliable contacting
- Fully insulated case
- Axial version



Terminals

- Internal thread M6 × 8 and M8 × 10
- Axial

Mounting

- On the terminals

Individual data sheets

Individual data sheets contain detailed specification incl. thermal data. Upon request, these data sheets are available for each capacitor type.

Technical data

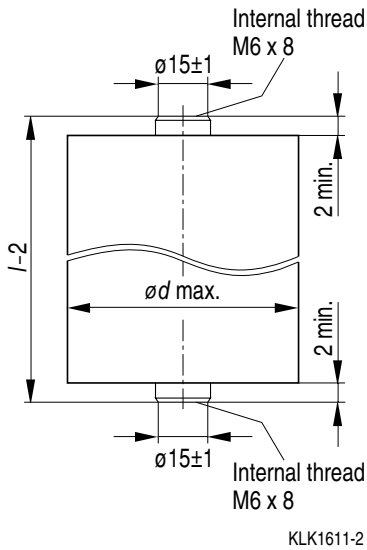
| | | |
|--|----------------------------------|---|
| Standards | | IEC 1071-1/2 EN 61071-1/2 VDE 0560 part 120 and 121 |
| Dielectric dissipation factor | $\tan \delta_0$ | 2×10^{-4} |
| Capacitance tolerance | | $\pm 10\%$ |
| Max. repetitive rate of voltage rise | $(dv/dt)_{\max}$ | $\frac{\hat{I}}{C}$ |
| Max. non-repetitive rate of voltage rise | $(dv/dt)_s$ | $\frac{I_s}{C}$ |
| Climatic data: | | |
| Min. operating temperature | T_{\min} | $-25\text{ }^\circ\text{C}$ |
| Max. operating temperature | T_{\max} | $+85\text{ }^\circ\text{C}$ |
| Average relative humidity | | $\leq 95\%$ |
| Failure quota | $\alpha_{\text{FQ}(\text{co})}$ | 300 failures per 10^9 component hours |
| Load duration | $t_{\text{LD}(\text{co})}$ | 100 000 h |
| Storage temperature limit | T_{stg} | $\leq 98\text{ mm diameter: } -55/+85\text{ }^\circ\text{C}$ $\geq 103\text{ mm diameter: } -30/+85\text{ }^\circ\text{C}$ |
| IEC climatic category (IEC 68-1 and 2) | | 25/085/56 |
| Test A, cold | | $-25\text{ }^\circ\text{C}$ |
| Test B, dry heat | | $+85\text{ }^\circ\text{C}$ |
| Test Ca, damp heat, steady state | | 56 days/ $40\text{ }^\circ\text{C}/93\text{ } \%$ rel. humidity |
| Values after test Ca: | | |
| Capacitance change | $\Delta C/C$ | $\leq 1\%$ |
| Insulation resistance | R_{ins} | $C_R \leq 1\text{ }\mu\text{F: } \geq 10000\text{ M}\Omega$ |
| Self-discharge time constant $\tau =$ | $R_{\text{ins}} \times C$ | $C_R > 1\text{ }\mu\text{F: } \geq 10000\text{ s}$ |
| Dissipation factor change | $\Delta \tan \delta$ | $\leq 1 \times 10^{-4}$ |
| Test data: | | |
| Voltage test between terminals | | |
| DC test voltage | V_{TT} | $1.5 \times V_R, 10\text{ s}$ ($V_R = \text{DC}$) $1.75 \times V_R, 10\text{ s}$ ($V_R = \text{AC}$) |
| AC test voltage (rms value) | V_{TT} | $1.25 \times V_R, 50\text{ Hz}, 10\text{ s}$ ($V_R = \text{AC}$) |
| Insulation resistance | R_{ins} | $C_R \leq 1\text{ }\mu\text{F: } \geq 10000\text{ M}\Omega$ |
| Self-discharge time constant | $\tau = R_{\text{ins}} \times C$ | $C_R > 1\text{ }\mu\text{F: } \geq 10000\text{ s}$ |
| Dissipation factor (50 Hz) | $\tan \delta$ | $\leq 3 \times 10^{-4}$ |

Characteristics and ordering codes

| $C_R^{1)}$ | I_{\max} | \hat{i} | I_s | R_S 20 °C | L_{self} | Dimensions $d \times l$ | Fig. | Appr. weight | Ordering code |
|---|------------|-----------|-------|----------------|-------------------|----------------------------|------|-----------------|-----------------|
| μF | A | A | A | m Ω | nH | mm | | g | |
| $V_{\text{RDC}} = \text{AC } 3000 \text{ V}$ $\hat{v} = 3600 \text{ V}$ $V_{\text{TT}} = \text{AC } 3200 \text{ V, } 10 \text{ s}$ $V_{\text{R}} = \text{AC } 2500 \text{ V}$ $v_s = 5200 \text{ V}$ | | | | | | | | | |
| 0.5 | 70 | 2200 | 5500 | 1.9 | <20 | 68 × 79 | 2 | 550 | B25856K7504K013 |
| 1 | 80 | 3000 | 7500 | 1.1 | <20 | 83 × 79 | 2 | 700 | B25856K7105K003 |
| 1.5 | 80 | 4800 | 12000 | 0.7 | <20 | 93 × 79 | 2 | 800 | B25856K7155K013 |
| 2 | 80 | 3600 | 9000 | 1.3 | <20 | 88 × 100 | 2 | 900 | B25856K7205K003 |
| 2.5 | 80 | 4500 | 11000 | 1.0 | <20 | 98 × 100 | 2 | 1100 | B25856K7255K003 |
| 3 | 80 | 3600 | 9000 | 1.9 | <10 | 88 × 142 | 2 | 1100 | B25856J7305J003 |
| 3.5 | 80 | 4200 | 10500 | 1.7 | <20 | 93 × 142 | 2 | 1400 | B25856K7355K003 |
| 4 | 80 | 4800 | 12000 | 1.5 | <20 | 98 × 142 | 2 | 1500 | B25856K7405K003 |
| 5 | 80 | 6000 | 15000 | 1.2 | <20 | 108 × 142 | 2 | 1800 | B25856K7505K003 |
| $V_{\text{RDC}} = \text{AC } 3300 \text{ V}$ $\hat{v} = 4000 \text{ V}$ $V_{\text{TT}} = \text{AC } 3500 \text{ V, } 10 \text{ s}$ $V_{\text{R}} = \text{AC } 2800 \text{ V}$ $v_s = 5800 \text{ V}$ | | | | | | | | | |
| 0.1 | 20 | 350 | 900 | 8.0 | <20 | 40 × 70 | 1 | 160 | B25856K3104K003 |
| 0.5 | 70 | 1800 | 4500 | 1.7 | <20 | 73 × 79 | 2 | 600 | B25856K3504K003 |
| 2.5 | 80 | 3500 | 8800 | 2.0 | <20 | 88 × 142 | 2 | 1300 | B25856K3255K003 |
| $V_{\text{RDC}} = \text{AC } 4000 \text{ V}$ $\hat{v} = 4800 \text{ V}$ $V_{\text{TT}} = \text{AC } 4300 \text{ V, } 10 \text{ s}$ $V_{\text{R}} = \text{AC } 3400 \text{ V}$ $v_s = 7000 \text{ V}$ | | | | | | | | | |
| 0.2 | 50 | 1200 | 3000 | 2.6 | <20 | 53 × 70 | 1 | 250 | B25856K2204K003 |
| 0.5 | 80 | 3000 | 7500 | 1.1 | <20 | 83 × 79 | 2 | 700 | B25856K2504K003 |
| 1 | 80 | 3500 | 8800 | 1.3 | <20 | 88 × 105 | 2 | 1000 | B25856K2105K003 |
| 2 | 80 | 5000 | 12500 | 1.3 | <20 | 98 × 126 | 2 | 1350 | B25856K2205K003 |
| 2.5 | 80 | 3800 | 9400 | 2.3 | <20 | 88 × 168 | 2 | 1500 | B25856K2255K003 |
| 3 | 80 | 4500 | 11000 | 2.0 | <20 | 98 × 168 | 2 | 1700 | B25856K2305K003 |
| 4 | 80 | 6000 | 15000 | 1.5 | <20 | 108 × 168 | 2 | 2100 | B25856K2405K003 |

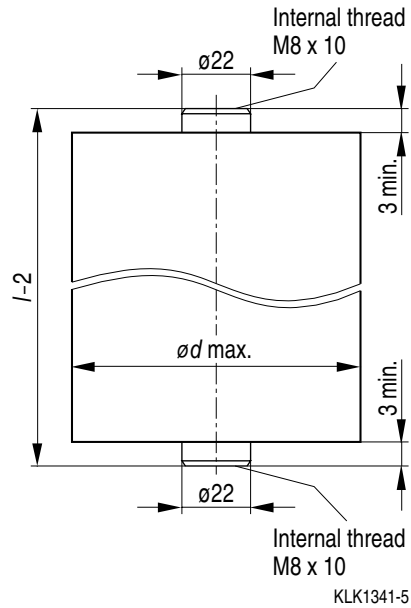
1) Other capacitance values upon request

Dimensional drawing 1



$\phi d_{max} = 40 \dots 68 \text{ mm}$:
 Internal thread = M6 x 8
 Max. torque = 7 Nm

Dimensional drawing 2



$\phi d_{max} = 68 \dots 108 \text{ mm}$:
 Internal thread = M8 x 10
 Max. torque = 7 Nm