Aluminum electrolytic capacitors

Snap-in capacitors

Series/Type: **B43640**

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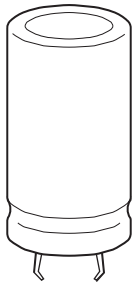
Long-life grade capacitors



Applications

Frequency converters
Solar inverters
Uninterruptible power supplies
Professional power supplies
Medical appliances
Not for automotive applications unless otherwise specified

Features

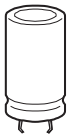
Extremely high CV product, very compact
High reliability
High ripple current capability
Capacitors with all insulation versions pass the needle flame test according to IEC 60695-11-5 for all flame exposure times up to 120 s
RoHS-compatible

Construction

Charge/discharge-proof, polar
Aluminum case, fully insulated with PET
Version with PVC insulation available upon request
Version with PVC insulation and additional PET insulation cap on terminal side available for insulating the capacitor from the PCB
Other case dimensions with length l > 55 mm are available upon request
Snap-in solder pins to hold component in place on PC-board
Minus pole marking on case surface
Minus pole not insulated from case
Overload protection by safety vent on the base

Terminals

Standard version with 2 terminals,
2 lengths available: 6.3 and 4.5 mm
3 terminals to ensure correct insertion: length 4.5 mm



Specifications and characteristics in brief

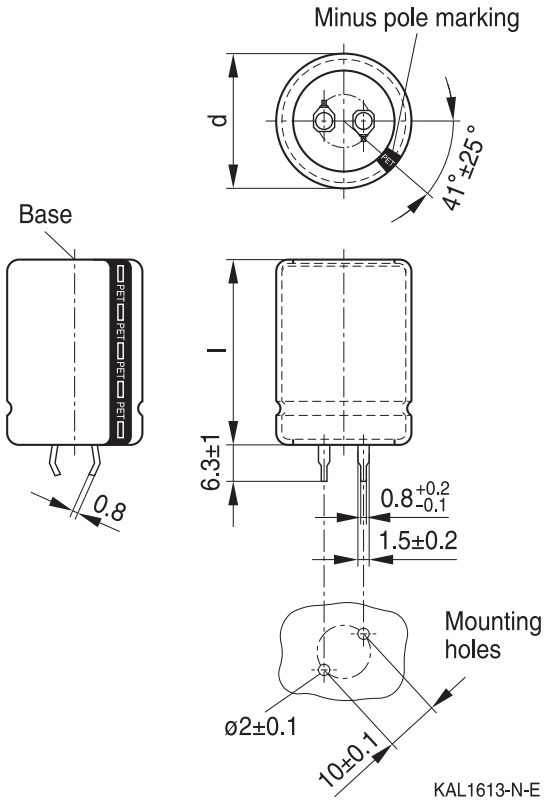
Rated voltage V_R Surge voltage V_S	200 ... 450 V DC 1.15 V_R (for V_R 250 V DC) 1.10 V_R (for V_R 400 V DC)	
Rated capacitance C_R Capacitance tolerance	82 ... 3300 µF ±20% M	
Dissipation factor tan (20 °C, 120 Hz)	V_R 250 V DC: tan 0.15 V_R 400 V DC: tan 0.20	
Leakage current I_{leak} (5 min, 20 °C)	$I_{leak} \leq 0.3\ \mu A \cdot \left(\frac{C_R}{\mu F} \cdot \frac{V_R}{V}\right)^{0.7} + 4\ \mu A$	
Self-inductance ESL	Approx. 20 nH	
Useful life[1)] 105 °C; V_R; $I_{AC,R}$	> 2000 h	Requirements: C/C 20% of initial value tan 2 times initial specified limit I_{leak} initial specified limit
Voltage endurance test 105 °C; V_R	2000 h	Post test requirements: C/C 10% of initial value tan 1.3 times initial specified limit I_{leak} initial specified limit
Vibration resistance test	To IEC 60068-2-6, test Fc: Frequency range 10 Hz ... 55 Hz, displacement amplitude 0.35 mm, acceleration max. 5 *g*, duration 3 × 2 h. Capacitor mounted by its body which is rigidly clamped to the work surface.	
Characteristics at low temperature	Max. impedance ratio at 100 Hz	
IEC climatic category	To IEC 60068-1: 40/105/56 (40 °C/+105 °C/56 days damp heat test)	
Sectional specification	IEC 60384-4	

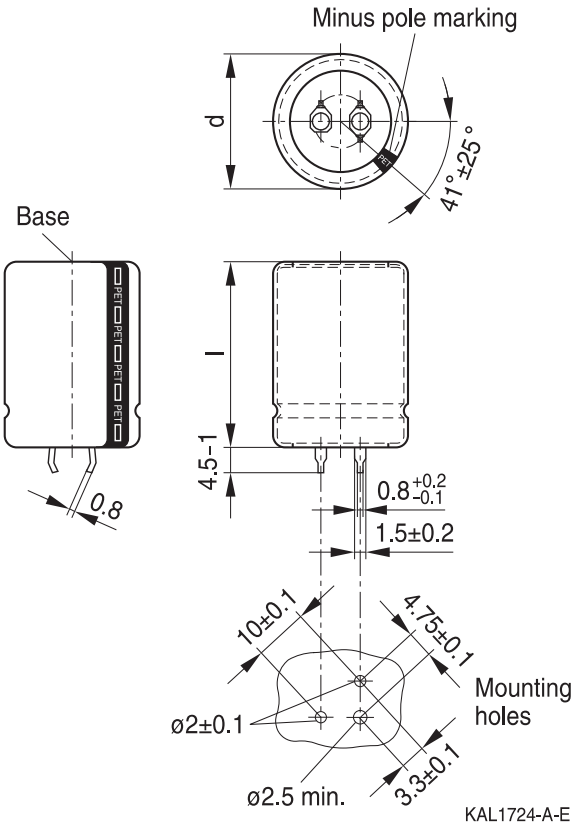
V_R	250 V	400 V
$Z_{-25\,°C} / Z_{20\,°C}$	3	5
$Z_{-40\,°C} / Z_{20\,°C}$	7	10

1) Refer to chapter "General technical information, 5 Useful life" on how to interpret useful life.

Dimensional drawings

Snap-in capacitors with standard insulation (PET)

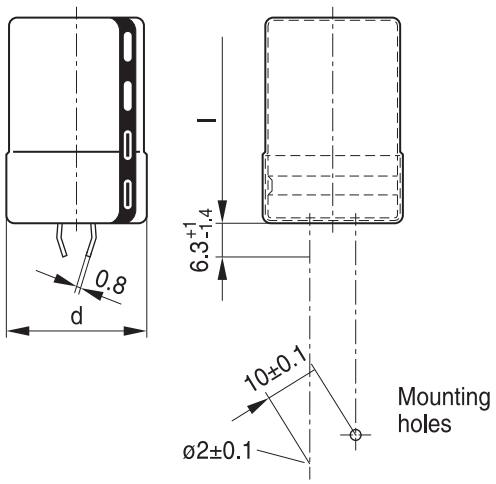




Snap-in terminals, length (6.3 ±1) mm.
Also available in a shorter version with a length of (4.5 1) mm.
Insulation is marked with "PET" on the sleeve.
Safety vent on the base.

Dimensions (mm)		Approx.	Packing units
d +1	l ±2	weight (g)	(pcs.)
22	25	9	160
22	30	12	160
22	35	15	160
22	40	18	160
22	45	20	160
22	50	24	160
25	25	13	130
25	30	17	130
25	35	19	130
25	40	22	130
25	45	25	130
25	50	29	130
25	55	32	130

Snap-in capacitors are also available with 3 terminals (length (4.5 1) mm).
Insulation is marked with "PET" on the sleeve.
Safety vent on the base.

Dimensions (mm)		Approx.	Packing units
d +1	l ±2	weight (g)	(pcs.)
30	25	17	80
30	30	23	80
30	35	29	80
30	40	36	80
30	45	41	80
30	50	46	80
30	55	53	80
35	25	22	60
35	30	29	60
35	35	36	60
35	40	41	60
35	45	56	60
35	50	70	60
35	55	81	60

Snap-in capacitors with PVC insulation and PET insulation cap on terminal side