Aluminum Capacitors
+125 °C, Miniature, Axial Lead

FEATURES

- Extended temperature range
- Economical
- Low DCL option
- For timing circuit applications
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free Available

QUICK REFERENCE DATA	
DESCRIPTION	**VALUE**
Nominal case size Ø D x L in mm	0.248" x 0.689" [6.3 x 17.5] to 0.492" x 1.752" [12.5 x 44.5]
Operating temperature	-55 °C to +125 °C
Rated capacitance range, C_R	6.8 µF to 3900 µF
Tolerance on C_R	± 20 %
Rated voltage range, U_R	3 WV_{DC} to 63 WV_{DC}
Termination	Axial leaded
Life validation test at 125 °C 500 h for case size BB to CB 1000 h for case size CC to DF 2000 h for case size DH to FK	ΔCAP ≤ 20 % from initial measurement. ΔESR ≤ 1.5 x initial specified limit. ΔDCL ≤ initial specified limit.
Shelf life 500 h at 85 °C	ΔCAP ≤ 20 % from initial measurement. ΔESR ≤ 1.5 x initial specified limit. ΔDCL ≤ 3 x the initial specified limit.
DC leakage current	I = 0.004 CV + 3 (3 V_{DC} to 63 V_{DC}) I in µA, C in µF, V in Volts

RIPPLE CURRENT MULTIPLIERS				
TEMPERATURE				
AMBIENT TEMPERATURE	**MULTIPLIERS**			
+105 °C	0.5			
+85 °C	1.0			
+65 °C	2.0			
+55 °C or less	2.5			
FREQUENCY (Hz)				
WV_{DC}	**50 TO 60**	**100 TO 120**	**300 TO 400**	**> 1000**
3 to 63	0.90	1.00	1.10	1.35

DIMENSIONS in inches [millimeters]

CASE CODE	NOMINAL		STYLE 2		STYLE 5	
	D	L	D (max.)	L (max.)	D (max.)	L (max.)
BB	0.248 [6.3]	0.689 [17.5]	0.276 [7.0]	0.756 [19.2]	0.276 [7.0]	0.815 [20.7]
CB	0.315 [8.0]	0.689 [17.5]	0.339 [8.6]	0.756 [19.2]	0.339 [8.6]	0.815 [20.7]
CC	0.315 [8.0]	0.807 [20.5]	0.339 [8.6]	0.878 [22.3]	0.339 [8.6]	0.937 [23.8]
DC	0.374 [9.5]	0.807 [20.5]	0.402 [10.2]	0.878 [22.3]	0.402 [10.2]	0.937 [23.8]
DD	0.374 [9.5]	0.945 [24.0]	0.402 [10.2]	1.004 [25.5]	0.402 [10.2]	1.063 [27.0]
DF	0.374 [9.5]	1.260 [32.0]	0.402 [10.2]	1.319 [33.5]	0.402 [10.2]	1.378 [35.0]
DH	0.374 [9.5]	1.496 [38.0]	0.402 [10.2]	1.567 [39.8]	0.402 [10.2]	1.626 [41.3]
EF	0.433 [11.0]	1.260 [32.0]	0.465 [11.8]	1.319 [33.5]	0.465 [11.8]	1.378 [35.0]
EH	0.433 [11.0]	1.496 [38.0]	0.465 [11.8]	1.567 [39.8]	0.465 [11.8]	1.63 [41.3]
FH	0.492 [12.5]	1.496 [38.0]	0.516 [13.1]	1.567 [39.8]	0.516 [13.1]	1.63 [41.3]
FK	0.492 [12.5]	1.752 [44.5]	0.516 [13.1]	1.83 [46.5]	0.516 [13.1]	1.89 [48.0]

For technical questions, contact: aluminumcaps4@vishay.com
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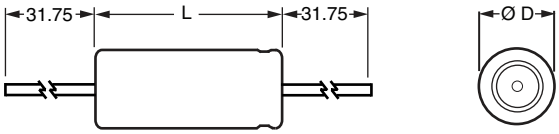
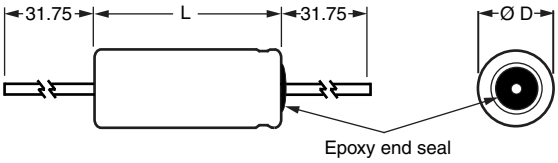
DIMENSIONS AND AVAILABLE FORMS

Case Style 2



Lead diameter
No. 20 AWG (0.032" [0.813 mm] Dia.)

Case Style 5



PART NUMBER INFORMATION

630D	826	M	003	BB	2	A
TYPE	CAPACITANCE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING	CASE CODE	CASE STYLE	PACKAGING
Identifies the series name.	Expressed in pF. The first two digits are significant figures. The third is the number of zeros.	M = -20 % / +20 % A = -10 % / +10 %	Expressed in volts. The letter “R” signifies a decimal point (i.e. 6R3 = 6.3 V).	See table Dimensions.	2 = polyester insulating sleeve (Std.) 5 = polyester insulating sleeve with resin end seal (required for exposure to halogenated cleaning solvents)	A = bulk pack (Std.) T = tape and reel (Not available in G and L diameters)

Note

- For lead (Pb)-free / RoHS compliant products add suffix “E3” to part number.
  Example: 630D157M030DF2AE3

Statements about product lifetime are based on calculations and internal testing. They should only be interpreted as estimations. Also due to external factors, the lifetime in the field application may deviate from the calculated lifetime. In general, nothing stated herein shall be construed as a guarantee of durability.

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