Aluminum Capacitors
+ 105 °C, Tubular, Axial Lead

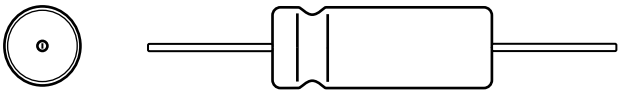


Fig.1 Component outlines

FEATURES

- Temperature range - 55 °C to + 105 °C
- Long life
- Low ESR
- Available on special order - Call Buy/Resale Division for part numbers and specifications

Pb-free Available

QUICK REFERENCE DATA

DESCRIPTION	VALUE
Nominal case size Ø D x L in mm	0.625" x 1.125" [15.875 x 28.575] to 1.0" x 3.625" [25.4 x 92.075]
Operating temperature	- 55 °C to + 105 °C
Rated Capacitance range, C_R	12 µF to 33 000 µF
Tolerance on C_R	- 10 %, + 50 %
Rated voltage range, U_R	6.3 WVDC to 300 WVDC
Termination	axial leads
Life validation test at 105 °C	2000 hours: Δ CAP ≤ 15 % from initial measurement Δ ESR ≤ 1.25 x initial specified limit Δ DCL ≤ initial specified limit
Shelf life at 105 °C	500 hours: Δ CAP ≤ 10 % from initial measurement Δ ESR ≤ 1.15 x initial specified limit Δ DCL ≤ 2.0 x initial specified limit
DC leakage current	$I = K\sqrt{cv}$ K = 0.5 at + 25 °C; = 3.0 at + 105 °C I in µA, C in µF, V in Volts

RIPPLE CURRENT MULTIPLIERS

TEMPERATURE			
Ambient Temperature		Multipliers	
+ 105 °C		0.4	
+ 65 °C		1.4	
+ 45 °C		1.7	
+ 25 °C		2.0	
FREQUENCY (Hz)			
WVDC	50 - 60	300 - 400	1000 AND UP
0 - 60	0.85	1.10	1.15
61 - 250	0.83	1.15	1.20

LOW TEMPERATURE PERFORMANCE

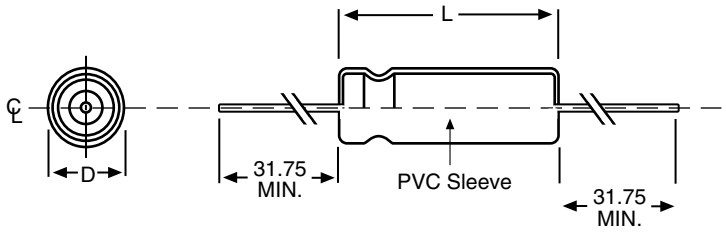
CAPACITANCE RATIO $C_{-55\,°C}/C_{+25\,°C}$ MINIMUM at 120 Hz	
Rated Voltage WVDC	Capacitance Remaining
0 - 25	75
26 - 100	80
101 - 250	85
ESR RATIO $ESR_{-55\,°C}/ESR_{+25\,°C}$ MAXIMUM at 120 Hz	
Rated Voltage WVDC	Multiplier
0 - 9	10
10 - 40	12
41 - 250	18

DIMENSIONS in inches [millimeters]

CASE CODE	STYLE 1 AND 2 INSULATING SLEEVE		STYLE 5 AND 7 INSULATING SLEEVE, COATED END SEAL		TYPICAL WEIGHT
	D	L	D	L	
FE	0.635 ± 0.020 [16.1 ± 0.51]	1.141 ± 0.062 [29.0 ± 1.57]	0.635 ± 0.020 [16.1 ± 0.51]	1.187 ± 0.062 [30.2 ± 1.57]	0.32 Oz. (9.0 g)
FJ	0.635 ± 0.020 [16.1 ± 0.51]	1.641 ± 0.062 [41.7 ± 1.57]	0.635 ± 0.020 [16.1 ± 0.51]	1.687 ± 0.062 [42.9 ± 1.57]	0.39 Oz. (11.0 g)
FL	0.635 ± 0.020 [16.1 ± 0.51]	2.141 ± 0.062 [54.4 ± 1.57]	0.635 ± 0.020 [16.1 ± 0.51]	2.187 ± 0.062 [55.6 ± 1.57]	0.53 Oz. (15.0 g)
FP	0.635 ± 0.020 [16.1 ± 0.51]	2.641 ± 0.062 [67.1 ± 1.57]	0.635 ± 0.020 [16.1 ± 0.51]	2.687 ± 0.062 [68.3 ± 1.57]	0.63 Oz. (18.0 g)
FS	0.635 ± 0.020 [16.1 ± 0.51]	3.141 ± 0.062 [79.8 ± 1.57]	0.635 ± 0.020 [16.1 ± 0.51]	3.187 ± 0.062 [81.0 ± 1.57]	0.88 Oz. (25.0 g)
FT	0.635 ± 0.020 [16.1 ± 0.51]	3.641 ± 0.062 [92.5 ± 1.57]	0.635 ± 0.020 [16.1 ± 0.51]	3.687 ± 0.062 [93.7 ± 1.57]	0.98 Oz. (28.0 g)
GE	0.760 ± 0.020 [19.3 ± 0.51]	1.141 ± 0.062 [29.0 ± 1.57]	0.760 ± 0.020 [19.3 ± 0.51]	1.187 ± 0.062 [30.2 ± 1.57]	0.46 Oz. (13.0 g)
GJ	0.760 ± 0.020 [19.3 ± 0.51]	1.641 ± 0.062 [41.7 ± 1.57]	0.760 ± 0.020 [19.3 ± 0.51]	1.687 ± 0.062 [42.9 ± 1.57]	0.67 Oz. (19.0 g)

DIMENSIONS in inches [millimeters]					
CASE CODE	STYLE 1 AND 2 INSULATING SLEEVE		STYLE 5 AND 7 INSULATING SLEEVE, COATED END SEAL		TYPICAL WEIGHT
	D	L	D	L	
GL	0.760 ± 0.020 [19.3 ± 0.51]	2.141 ± 0.062 [54.4 ± 1.57]	0.760 ± 0.020 [19.3 ± 0.51]	2.187 ± 0.062 [55.6 ± 1.57]	0.74 Oz. (21.0 g)
GP	0.760 ± 0.020 [19.3 ± 0.51]	2.641 ± 0.062 [67.1 ± 1.57]	0.760 ± 0.020 [19.3 ± 0.51]	2.687 ± 0.062 [68.3 ± 1.57]	0.88 Oz. (25.0 g)
GS	0.760 ± 0.020 [19.3 ± 0.51]	3.141 ± 0.062 [79.8 ± 1.57]	0.760 ± 0.020 [19.3 ± 0.51]	3.187 ± 0.062 [81.0 ± 1.57]	1.16 Oz. (33.0 g)
GT	0.760 ± 0.020 [19.3 ± 0.51]	3.641 ± 0.062 [92.5 ± 1.57]	0.760 ± 0.020 [19.3 ± 0.51]	3.687 ± 0.062 [93.7 ± 1.57]	1.33 Oz. (38.0 g)
HE	0.885 ± 0.020 [22.5 ± 0.51]	1.141 ± 0.062 [29.0 ± 1.57]	0.885 ± 0.020 [22.5 ± 0.51]	1.187 ± 0.062 [30.2 ± 1.57]	0.63 Oz. (18.0 g)
HJ	0.885 ± 0.020 [22.5 ± 0.51]	1.641 ± 0.062 [41.7 ± 1.57]	0.885 ± 0.020 [22.5 ± 0.51]	1.687 ± 0.062 [42.9 ± 1.57]	0.95 Oz. (27.0 g)
HL	0.885 ± 0.020 [22.5 ± 0.51]	2.141 ± 0.062 [54.4 ± 1.57]	0.885 ± 0.020 [22.5 ± 0.51]	2.187 ± 0.062 [55.6 ± 1.57]	1.02 Oz. (29.0 g)
HP	0.885 ± 0.020 [22.5 ± 0.51]	2.641 ± 0.062 [67.1 ± 1.57]	0.885 ± 0.020 [22.5 ± 0.51]	2.687 ± 0.062 [68.3 ± 1.57]	1.37 Oz. (39.0 g)
HS	0.885 ± 0.020 [22.5 ± 0.51]	3.141 ± 0.062 [79.8 ± 1.57]	0.885 ± 0.020 [22.5 ± 0.51]	3.187 ± 0.062 [81.0 ± 1.57]	1.72 Oz. (49.0 g)
HT	0.885 ± 0.020 [22.5 ± 0.51]	3.641 ± 0.062 [92.5 ± 1.57]	0.885 ± 0.020 [22.5 ± 0.51]	3.687 ± 0.062 [93.7 ± 1.57]	2.07 Oz. (59.0 g)
JE	1.010 ± 0.020 [25.7 ± 0.51]	1.141 ± 0.062 [29.0 ± 1.57]	1.010 ± 0.020 [25.7 ± 0.51]	1.187 ± 0.062 [30.2 ± 1.57]	0.81 Oz. (23.0 g)
JJ	1.010 ± 0.020 [25.7 ± 0.51]	1.641 ± 0.062 [41.7 ± 1.57]	1.010 ± 0.020 [25.7 ± 0.51]	1.687 ± 0.062 [42.9 ± 1.57]	1.02 Oz. (29.0 g)
JL	1.010 ± 0.020 [25.7 ± 0.51]	2.141 ± 0.062 [54.4 ± 1.57]	1.010 ± 0.020 [25.7 ± 0.51]	2.187 ± 0.062 [55.5 ± 1.57]	1.54 Oz. (44.0 g)
JP	1.010 ± 0.020 [25.7 ± 0.51]	2.641 ± 0.062 [67.1 ± 1.57]	1.010 ± 0.020 [25.7 ± 0.51]	2.687 ± 0.062 [68.3 ± 1.57]	1.86 Oz. (53.0 g)
JS	1.010 ± 0.020 [25.7 ± 0.51]	3.141 ± 0.062 [79.8 ± 1.57]	1.010 ± 0.020 [25.7 ± 0.51]	3.187 ± 0.062 [81.0 ± 1.57]	2.21 Oz. (63.0 g)
JT	1.010 ± 0.020 [25.7 ± 0.51]	3.641 ± 0.062 [92.5 ± 1.57]	1.010 ± 0.020 [25.7 ± 0.51]	3.687 ± 0.062 [93.7 ± 1.57]	2.52 Oz. (72.0 g)

DIMENSIONS AND AVAILABLE FORMS



ELECTRICAL DATA	
SYMBOL	DESCRIPTION
601D	series name
158	rated capacitance in pF (158 = 1500 µF)
F	capacitance tolerance, F = - 10 %, + 50 %
050	voltage rating at 105 °C
GL	dimensions, see table
1	terminal style

ORDERING EXAMPLE*

Electrolytic capacitor 601D series

601D 158 F 050 GL 1

* Note: For lead (Pb)-free / RoHS compliant products add suffix “E3” to part number
Example: 601D158F050GL1E3