

Aluminum Capacitors Powerlytic[®], Large Can

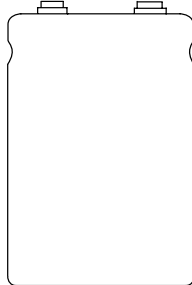


Fig. 1 Component Outlines

FEATURES

- High capacitance per case size
- High ripple current
- Low leakage current
- Long shelf life and operating life
- Type 36D ratings recommended for replacement applications only. For new designs, see Type 36DY.


RoHS*
COMPLIANT

QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Nominal case size Ø D x L in mm	1.453" x 2.250" [36.9 x 57.2] to 3.078" x 8.750" [78.2 x 222.3]
Operating temperature	- 40 °C to + 85 °C (36DX) - 40 °C to + 95 °C (36DE)
Rated capacitance range, C _R	190 µF to 50 000 µF
Tolerance on C _R	+ 75 %, - 10 % (10 WVDC to 100 WVDC) + 50 %, - 10 % (200 WVDC to 450 WVDC)
Rated voltage range, U _R	10 WVDC to 450 WVDC
Life validation test at 85 °C	1000 hours: Δ CAP ± 15 % from initial measurement. Δ ESR 1.5 x initial specified limit.

DIMENSIONS in inches [millimeters]							
CASE CODE	LARGE CAN CAPACITORS						
	NOMINAL		WITH INSULATING SLEEVE			TERMINAL SPACING M ± 0.016 [0.4]	TYPICAL WEIGHT (Grams)
	D ± 0.032 [0.8]	L ± 0.063 [1.6]	D (Max.)	L (Max.)	P TERMINAL H (Max.)		
AN	1.375 [35.0]	1.625 [41.0]	1.453 [36.9]	1.750 [44.5]	1.849 [47.0]	0.500 [12.7]	43.0
AY	1.375 [35.0]	1.875 [48.0]	1.453 [36.9]	2.000 [50.8]	1.099 [53.3]	0.500 [12.7]	54.0
AA	1.375 [35.0]	2.125 [54.0]	1.453 [36.9]	2.250 [57.2]	1.349 [59.7]	0.500 [12.7]	63.0
AM	1.375 [35.0]	2.625 [67.0]	1.453 [36.9]	2.750 [69.9]	1.849 [72.4]	0.500 [12.7]	82.0
AB	1.375 [35.0]	3.125 [79.0]	1.453 [36.9]	3.250 [82.6]	1.349 [85.1]	0.500 [12.7]	105.0
AL	1.375 [35.0]	3.625 [92.0]	1.453 [36.9]	3.750 [95.3]	1.849 [97.8]	0.500 [12.7]	122.0
AC	1.375 [35.0]	4.125 [105.0]	1.453 [36.9]	4.250 [108.0]	1.349 [110.5]	0.500 [12.7]	129.0
AD	1.375 [35.0]	4.625 [117.0]	1.453 [36.9]	4.750 [120.7]	1.849 [123.2]	0.500 [12.7]	162.0
AE	1.375 [35.0]	5.125 [130.0]	1.453 [36.9]	5.250 [133.4]	1.349 [125.9]	0.500 [12.7]	179.0
AF	1.375 [35.0]	5.625 [143.0]	1.453 [36.9]	5.750 [146.1]	1.849 [148.6]	0.500 [12.7]	201.0
EN	1.750 [44.0]	1.625 [41.0]	1.828 [46.4]	1.750 [44.5]	1.849 [47.0]	0.750 [19.1]	71.0
EY	1.750 [44.0]	1.875 [48.0]	1.828 [46.4]	2.000 [50.8]	2.099 [53.3]	0.750 [19.1]	88.0
EA	1.750 [44.0]	2.125 [54.0]	1.828 [46.4]	2.250 [57.2]	2.349 [59.7]	0.750 [19.1]	102.0
EM	1.750 [44.0]	2.625 [67.0]	1.828 [46.4]	2.750 [69.9]	2.849 [72.4]	0.750 [19.1]	133.0
EB	1.750 [44.0]	3.125 [79.0]	1.828 [46.4]	3.250 [82.6]	3.349 [85.1]	0.750 [19.1]	167.0
EL	1.750 [44.0]	3.625 [92.0]	1.828 [46.4]	3.750 [95.3]	3.849 [97.8]	0.750 [19.1]	198.0

* Pb containing sleeves are not RoHS compliant (date codes older than May 1st, 2005)

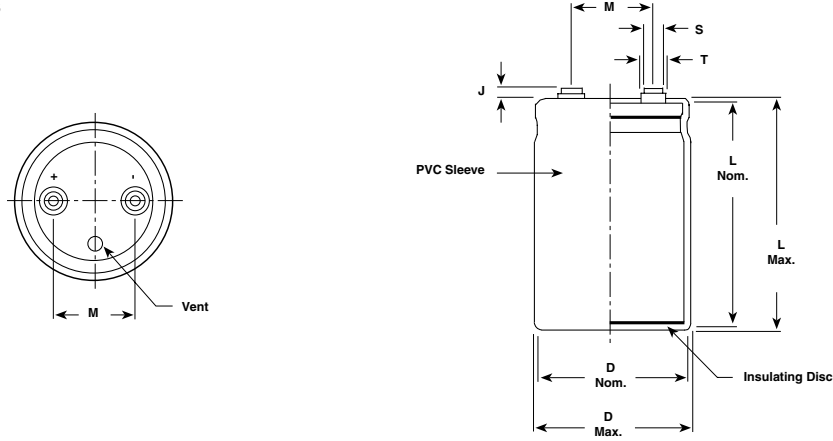
NOTE: To ensure delivery of lead (Pb)-free RoHS compliant parts during the transition period please contact your Vishay Sales office

DIMENSIONS in inches [millimeters]							
LARGE CAN CAPACITORS							
CASE CODE	NOMINAL		WITH INSULATING SLEEVE			TERMINAL SPACING M \pm 0.016 [0.4]	TYPICAL WEIGHT (Grams)
	D \pm 0.032 [0.8]	L \pm 0.063 [1.6]	D (Max.)	L (Max.)	P TERMINAL H (Max.)		
EC	1.750 [44.0]	4.125 [105.0]	1.828 [46.4]	4.250 [108.0]	4.349 [110.5]	0.750 [19.1]	230.0
ED	1.750 [44.0]	4.625 [117.0]	1.828 [46.4]	4.750 [120.7]	4.849 [123.2]	0.750 [19.1]	252.0
EE	1.750 [44.0]	5.125 [130.0]	1.828 [46.4]	5.250 [133.4]	5.349 [135.9]	0.750 [19.1]	269.0
EF	1.750 [44.0]	5.625 [143.0]	1.828 [46.4]	5.750 [146.1]	5.849 [148.6]	0.750 [19.1]	318.0
BY	2.000 [51.0]	1.875 [48.0]	2.078 [52.8]	2.000 [50.8]	2.099 [53.3]	0.875 [22.2]	113.0
BA	2.000 [51.0]	2.125 [54.0]	2.078 [52.8]	2.250 [57.2]	2.349 [59.7]	0.875 [22.2]	133.0
BM	2.000 [51.0]	2.625 [67.0]	2.078 [52.8]	2.750 [69.9]	2.849 [72.4]	0.875 [22.2]	176.0
BB	2.000 [51.0]	3.125 [79.0]	2.078 [52.8]	3.250 [82.6]	3.349 [85.1]	0.875 [22.2]	213.0
BL	2.000 [51.0]	3.625 [92.0]	2.078 [52.8]	3.750 [95.3]	3.849 [97.8]	0.875 [22.2]	261.0
BC	2.000 [51.0]	4.125 [105.0]	2.078 [52.8]	4.250 [108.0]	4.349 [110.5]	0.875 [22.2]	381.0
BD	2.000 [51.0]	4.625 [117.0]	2.078 [52.8]	4.750 [120.7]	4.849 [123.2]	0.875 [22.2]	326.0
BE	2.000 [51.0]	5.125 [130.0]	2.078 [52.8]	5.250 [133.4]	5.349 [135.9]	0.875 [22.2]	337.0
BF	2.000 [51.0]	5.625 [143.0]	2.078 [52.8]	5.750 [146.1]	5.849 [148.6]	0.875 [22.2]	408.0
CB	2.500 [64.0]	3.125 [79.0]	2.578 [65.5]	3.250 [82.6]	N/A	1.125 [28.6]	329.0
CL	2.500 [64.0]	3.625 [92.0]	2.578 [65.5]	3.750 [95.3]	N/A	1.125 [28.6]	400.0
CC	2.500 [64.0]	4.125 [105.0]	2.578 [65.5]	4.250 [108.0]	N/A	1.125 [28.6]	473.0
CD	2.500 [64.0]	4.625 [117.0]	2.578 [65.5]	4.750 [120.7]	N/A	1.125 [28.6]	562.0
CE	2.500 [64.0]	5.125 [130.0]	2.578 [65.5]	5.250 [133.4]	N/A	1.125 [28.6]	607.0
CF	2.500 [64.0]	5.625 [143.0]	2.578 [65.5]	5.750 [146.1]	N/A	1.125 [28.6]	675.0
DB	3.000 [76.0]	3.125 [79.0]	3.078 [78.2]	3.250 [82.6]	N/A	1.250 [31.8]	496.0
DL	3.000 [76.0]	3.625 [92.0]	3.078 [78.2]	3.750 [95.3]	N/A	1.250 [31.8]	598.0
DC	3.000 [76.0]	4.125 [105.0]	3.078 [78.2]	4.250 [108.0]	N/A	1.250 [31.8]	700.0
DD	3.000 [76.0]	4.625 [117.0]	3.078 [78.2]	4.750 [120.7]	N/A	1.250 [31.8]	802.0
DE	3.000 [76.0]	5.125 [130.0]	3.078 [78.2]	5.250 [133.4]	N/A	1.250 [31.8]	944.0
DF	3.000 [76.0]	5.625 [143.0]	3.078 [78.2]	5.750 [146.1]	N/A	1.250 [31.8]	1004.0
DJ	3.000 [76.0]	8.625 [219.0]	3.078 [78.2]	8.750 [222.3]	N/A	1.250 [31.8]	1403.0

DIMENSIONS in inches [millimeters]						
BRACKETS (RoHS COMPLIANT)						
TYPE	PART NUMBER	A	B	C	FIGURE NUMBER	
2 Feet	1245860035A	1.375 [34.9]	1.781 [45.2]	2.218 [56.3]	1	
3 Feet	1245860036A	2.000 [50.8]	2.500 [63.5]	2.875 [73.0]	2	
3 Feet	1245860037A	2.500 [63.5]	3.000 [76.2]	3.375 [85.7]	2	
3 Feet	1245860038A	3.000 [76.2]	3.500 [88.9]	3.875 [98.4]	2	
SCREW INSERT TERMINAL DIMENSIONS						
TERMINAL CODE	THREAD	THREAD DEPTH	HEIGHT J \pm 0.032 [0.81]	DIAMETER S \pm 0.010 [0.25]	DIAMETER T \pm 0.010 [0.25]	NOTES
A	10-32 NF-28	0.219 [5.6]	0.063 [1.6]	0.313 [8.0]	0.438 [11.1]	All cases codes
B	10-32 NF-28	0.375 [9.5]	0.250 [6.4]	0.313 [8.0]	0.438 [11.1]	All cases codes
D	1/4-28 NF-28	0.344 [8.7]	0.093 [2.4]	0.688 [17.5]	-	C & D dia. codes only

DIMENSIONS AND AVAILABLE FORMS

Screw Insert Terminals



Large Can Brackets

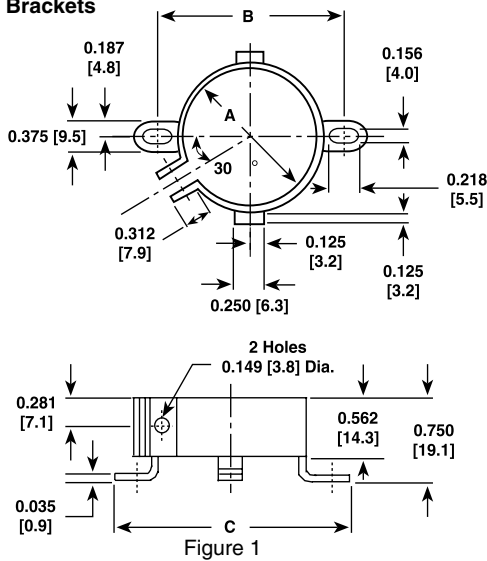


Figure 1

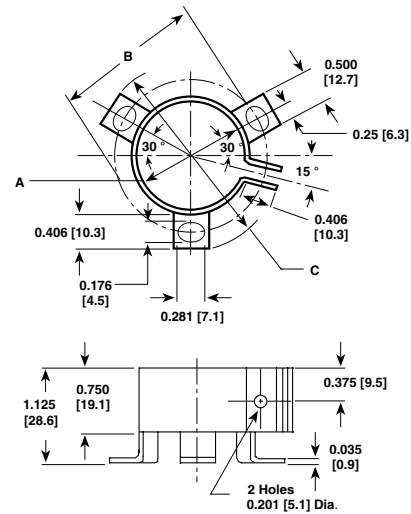


Figure 2

ELECTRICAL DATA (Original/improved ratings)		
CAPACITANCE (μF)	CASE CODE	PART NUMBER
TYPE 36D ORIGINAL RATINGS		
25 WVDC at + 85 °C, SURGE = 30 V		
2700.0*	AA	36D272G025AA2A
5500.0*	AB	36D552G025AB2A
40 WVDC at + 85 °C, SURGE = 50 V		
5500.0*	AC	36D552G040AC2A
8400.0*	BB	36D842G040BB2A
50 WVDC at + 85 °C, SURGE = 650 V		
1300.0*	AA	36D132G050AA2A
5200.0*	AE	36D522G050AE2A
TYPE 36DE IMPROVED RATINGS		
25 WVDC at + 85 °C, SURGE = 30 V		
40 000.0*	BB	36DE403G025BB2A
TYPE 36DE ORIGINAL RATINGS		
10 WVDC at + 85 °C, SURGE = 12 V		
23 000.0*	AA	36DE233G010AA2A
40 WVDC at + 85 °C, SURGE = 50 V		
24 000.0*	BB	36DE243G040BB2A

* This is representative of normally stocked ratings. Many other ratings are available.



ELECTRICAL DATA (Original/improved ratings)		
CAPACITANCE (μF)	CASE CODE	PART NUMBER
TYPE 36DX IMPROVED RATINGS		
200 WVDC at + 85 °C, SURGE = 250 V		
850.0*	AC	36DX851F200AC2A
2000.0*	BC	36DX202F200BC2A
2800.0*	BC	36DX282F200BC2A
3400.0*	CC	36DX342F200CC2A
7400.0*	DF	36DX742F200DF2A
250 WVDC at + 85 °C, SURGE = 300 V		
500.0*	AB	36DX501F250AB2A
350 WVDC at + 85 °C, SURGE = 400 V		
260.0*	AB	36DX261F350AB2A
5100.0	DJ	36DX512F350DJ2A
450 WVDC at + 85 °C, SURGE = 525 V		
230.0*	AC	36DX231F450AC2A
2000.0*	DF	36DX202F450DF2A
TYPE 36DX ORIGINAL RATINGS		
15 WVDC at + 85 °C, SURGE = 18 V		
7500.0*	AA	36DX752G015AA2A
15 000.0*	AB	36DX153G015AB2A
22 000.0*	AC	36DX223G015AC2A
34 000.0*	AF	36DX343G015AF2A
50 000.0*	BC	36DX503G015BC2A
25 WVDC at + 85 °C, SURGE = 30 V		
4500.0*	AA	36DX452G025AA2A
9000.0*	AB	36DX902G025AB2A
13 000.0*	AC	36DX133G025AC2A
30 000.0*	BC	36DX303G025BC2A
50 000.0*	CC	36DX503G025CC2A
30 WVDC at + 85 °C, SURGE = 40 V		
4000.0*	AA	36DX402G030AA2A
8000.0*	AB	36DX802G030AB2A
18 000.0*	AF	36DX183G030AF2A
26 000.0	BC	36DX263G030BC2A
40 WVDC at + 85 °C, SURGE = 50 V		
2900.0*	AA	36DX292G040AA2A
5800.0*	AB	36DX582G040AB2A
8700.0*	AC	36DX872G040AC2A
20 000.0*	BC	36DX203G040BC2A
34 000.0*	CC	36DX343G040CC2A
50 WVDC at + 85 °C, SURGE = 65 V		
2400.0*	AA	36DX242G050AA2A
4800.0*	AB	36DX482G050AB2A
7200.0*	AC	36DX722G050AC2A
11 000.0	AF	36DX113G050AF2A
16 000.0*	BC	36DX163G050BC2A
24 000.0*	BF	36DX243G050BF2A
40 000.0*	CF	36DX403G050CF2A
41 000.0*	DC	36DX413G050DC2A
75 WVDC at + 85 °C, SURGE = 95 V		
1400.0*	AA	36DX142G075AA2A
10 000.0*	BC	36DX103G075BC2A
17 000.0*	CC	36DX173G075CC2A

* This is representative of normally stocked ratings. Many other ratings are available. Check your nearest stocking distributor. Additional Part Numbers normally found in distribution inventory include:

36D103G075CC2A	36D231G013BB2A	36D902G050BC2A	36DX332F350DF2A
36D123G040BC2A	36D262G050AB2A	36DX103F250DJ2A	36DX352F450DJ2A
36D133G015AC2A	36D392G050AC2A	36DX172G100AB2A	36DX372F350DF2A
36D153G050CC2A	36D392G075BB2A	36DX203G025AF2A	36DX422G075AC2A
36D191F350AB2A	36D602G050BB2A	36DX312F450DJ2A	



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