

PG-2HED - High Energy Discharge

-40°C +70°C



Capacitors Diameter (mm)	50	63	76	90
Terminal Style - Round	○	○	○	○
Terminal Style - Across Flat	○	○	○	○

For details see pages 3, 4, 5

Specifications

- **Voltage range** : 350 VDC to 450 VDC
- **Can sizes** : 50φ x 105mm to 90φ x 220mm
- **Operating temperature range** : - 40°C to + 70°C
- **Capacitance** : 680 MFD to 6800 MFD
- **Tolerance** : -10% to +20%
- **Notes** :
 1. Can is negative, However, it is isolated with a PVC insulating sleeve and polypropylene end-disc.
 2. The base stud is also negative and can be insulated with a nylon nut. Please see the page regarding mounting accessories for details.

Application

PG-2HED range is designed for large instant energy discharge application like capacitor discharge welding, magnetisers and other pulse discharge applications.

Capacitor mounting

Capacitors are available in screw terminals in three mounting styles


- AEST** - Screw terminals with plain insulated base. *see page 3, 4*
- AEST-D** - Screw terminals with stud mounting. *see page 3, 4*
- AEST-AL** - Capacitor with aluminium bottom disc. *see page 5*

Capacitor Terminal Style

Capacitors are available in two different terminal style, round and across flat. Below table summarizes the available terminal styles in different capacitors diameter

Marking on capacitors

Each capacitor will have the following information printed on it, sequentially :

- The Company's symbol  followed by the words ALCON ELECTRONICS
- The capacitor grade viz. PG-2HED
- The capacitance value ___ MFD, rated voltage ___VDC
- The surge voltage
- Capacity tolerance
- Climatic category
- Part number on non-standard capacitors
- CE marking

Useful life for Charge and Discharge

- Test Conditions
- a. No. of cycles. 10000
 - b. Temperature : 5°C to 40°C
 - c. Charge and Discharge cycles duration : 30 sec

Manufacturing Date Code Chart

The manufacturing code shall consists of four digits (alphanumeric). The first two shall denote the date (numeric). The third stands for the month (alpha-numeric). The fourth stands for the year (alphabet)

First two spaces DATE	Third space MONTH	Fourth space YEAR
01	1 = JANUARY	A = 2012
02	2 = FEBRUARY	B = 2013
03	3 = MARCH	C = 2014
.	4 = APRIL	D = 2015
.	5 = MAY	E = 2016
.	6 = JUNE	F = 2017
10	7 = JULY	G = 2018
11	8 = AUGUST	H = 2019
.	9 = SEPTEMBER	J = 2020
.	X = OCTOBER	K = 2021
.	Y = NOVEMBER	L = 2022
31	Z = DECEMBER	M = 2023

For example :

1. Manufacturing code 023A will mean 2nd March, 2012
2. Manufacturing code 10XA will mean 10th October, 2012

PG-2HED - High Energy Discharge

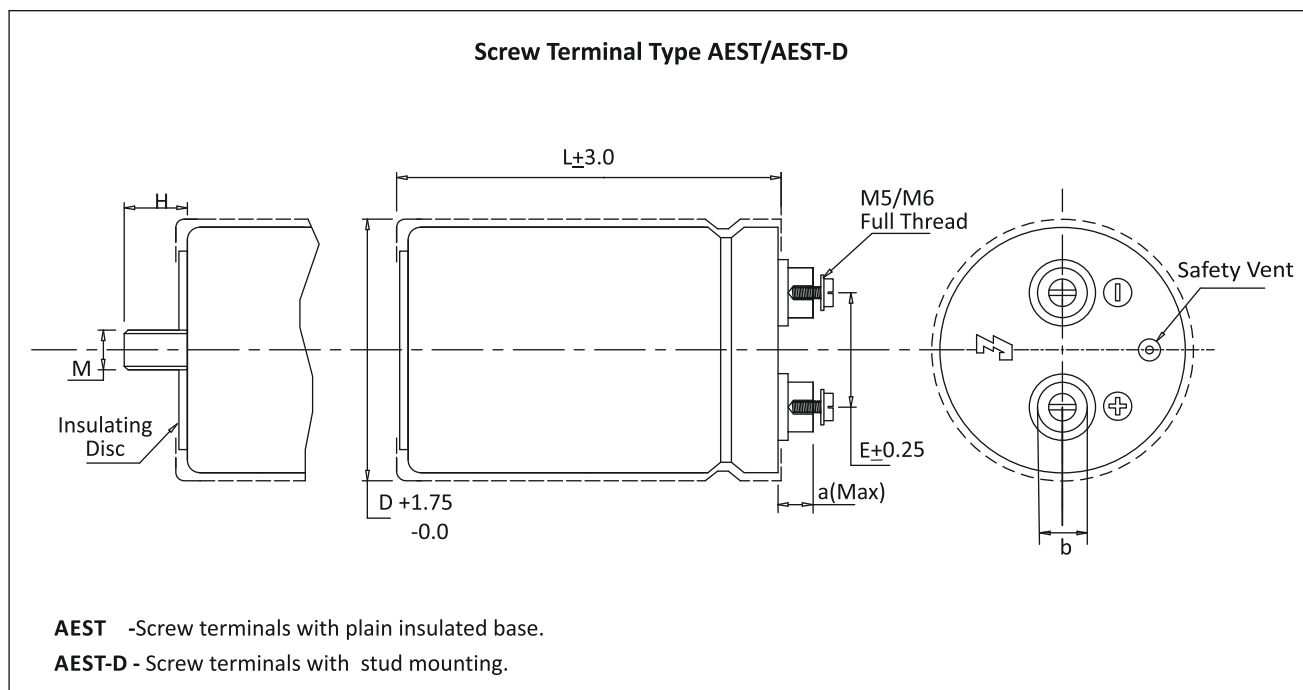
-40°C +70°C

Standard Capacitor Values

Rated Voltage (VDC)	Surge Voltage (VDC)	Capacitance Nominal (MFD)	Max. Tan Delta at 100Hz, 25°C	Max. Leakage Current at rated voltage and 25°C (micro-amp)	Can size Nominal D x L mm	Case Code	Ordering code
350	385	1500	0.12	3150	50X105	022	SA015000350HD022____M01
		2200	0.12	4620	63X105	026	SA022000350HD026____M01
		3300	0.12	6930	63X145	035	SA033000350HD035____M01
		3900	0.12	8190	76X105	028	SA039000350HD028____M01
		4700	0.12	9870	76X145	081	SA047000350HD081____M01
		5600	0.12	11760	76X145	081	SA056000350HD081____M01
		6800	0.12	14280	76X220	092	SA068000350HD092____M01
		8200	0.12	17220	76X220	092	SA082000350HD092____M01
		10000	0.12	21000	76X220	092	SA100000350HD092____M01
		12000	0.12	25200.0	90X175	096	SA120000350HD096____M01
		15000	0.12	31500.0	90X220	094	SA150000350HD094____M01
400	440	1500	0.12	3600	63X105	026	SA015000400HD026____M01
		2200	0.12	4620	63X105	026	SA022000400HD026____M01
		3300	0.12	6930	76X105	028	SA033000400HD028____M01
		3900	0.12	8190	76X145	081	SA039000400HD081____M01
		4700	0.12	9870	76X145	081	SA047000400HD081____M01
		5600	0.12	11760	76X175	090	SA056000400HD090____M01
		6800	0.12	14280	90X145	095	SA068000400HD095____M01
		8200	0.12	17220	90X175	096	SA082000400HD096____M01
		10000	0.12	21000	90X220	094	SA100000400HD094____M01
		12000	0.12	25200	90X220	094	SA120000400HD094____M01
450	495	1000	0.12	2700	63X105	026	SA010000450HD026____M01
		1500	0.12	4050	63X105	026	SA015000450HD026____M01
		2200	0.12	5940	63X145	035	SA022000450HD035____M01
		3300	0.12	8910	76X145	081	SA033000450HD081____M01
		4700	0.12	12690	76X175	090	SA047000450HD090____M01
		5600	0.12	15120	90X145	095	SA056000450HD095____M01
		6800	0.12	18360	76X220	092	SA068000450HD092____M01
		8200	0.12	22140	90X220	094	SA082000450HD094____M01
		10000	0.12	27000	90X220	094	SA100000450HD094____M01

Custom designed capacitors available

Terminal Style And Dimension With Round Insert

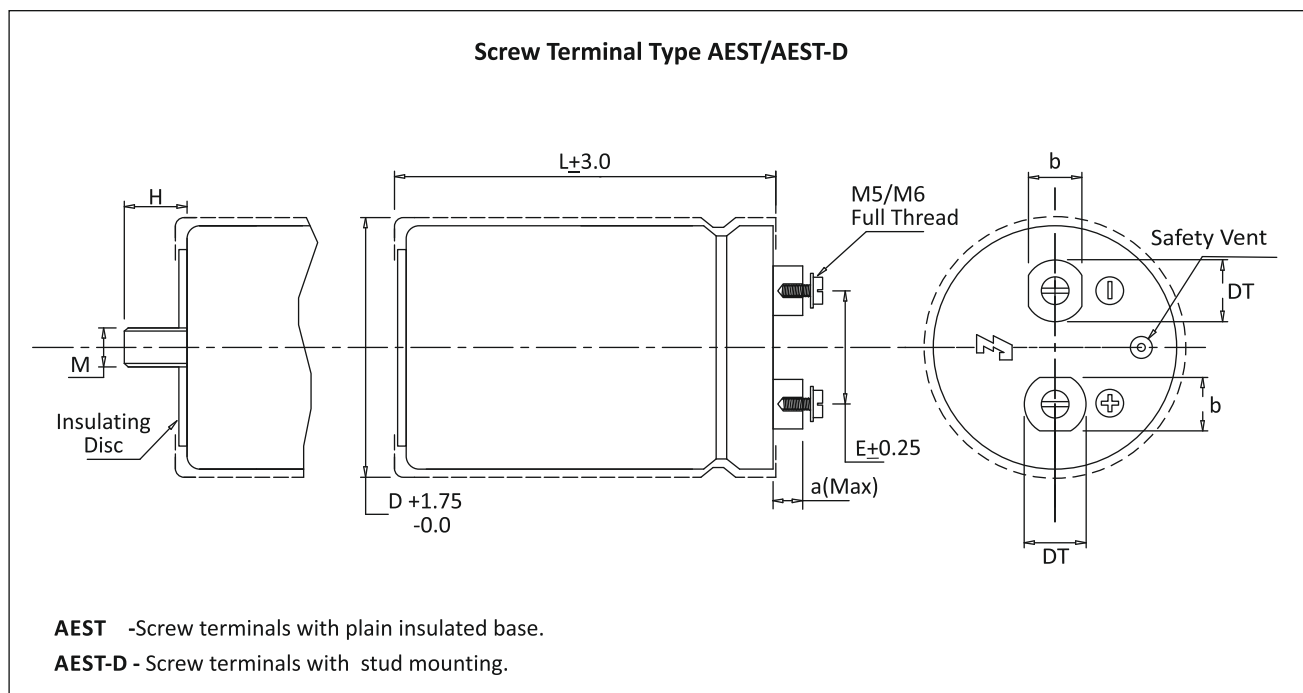


Dimension in mm.

Terminal	D	E	L	a (Max)	b±0.1	M	H±1.0
M5	35	12.6	62	7.8	9.5	---	---
M5	35	12.6	80	7.8	9.5	---	---
M5	35	12.6	105	7.8	9.5	---	---
M5	50	22.1	80	7.8	9.5	M 12	17.0
M5	50	22.1	105	7.8	9.5	M 12	17.0
M5	50	22.1	120	7.8	9.5	M 12	17.0
M5	63	28.5	105	7.8	12.0	M 12	17.0
M5	63	28.5	120	7.8	12.0	M 12	17.0
M5	63	28.5	146	7.8	12.0	M 12	17.0
M5	76	31.6	105	7.8	12.0	M 12	17.0
M5	76	31.6	120	7.8	12.0	M 12	17.0
M5	76	31.6	146	7.8	12.0	M 12	17.0
M5	76	31.6	175	7.8	12.0	M 12	17.0
M5	76	31.6	220	7.8	12.0	M 12	17.0
M5	76	31.6	240	7.8	12.0	M 12	17.0
M6	76	31.6	105	5.3*	16.0	M 12	17.0
M6	76	31.6	120	5.3*	16.0	M 12	17.0
M6	76	31.6	146	5.3*	16.0	M 12	17.0
M6	76	31.6	175	5.3*	16.0	M 12	17.0
M6	76	31.6	220	5.3*	16.0	M 12	17.0
M6	76	31.6	240	5.3*	16.0	M 12	17.0
M6	90	32	105	5.3*	16.0	M 12	17.0
M6	90	32	146	5.3*	16.0	M 12	17.0
M6	90	32	175	5.3*	16.0	M 12	17.0
M6	90	32	220	5.3*	16.0	M 12	17.0
M6	90	32	240	5.3*	16.0	M 12	17.0

* Low Post Design

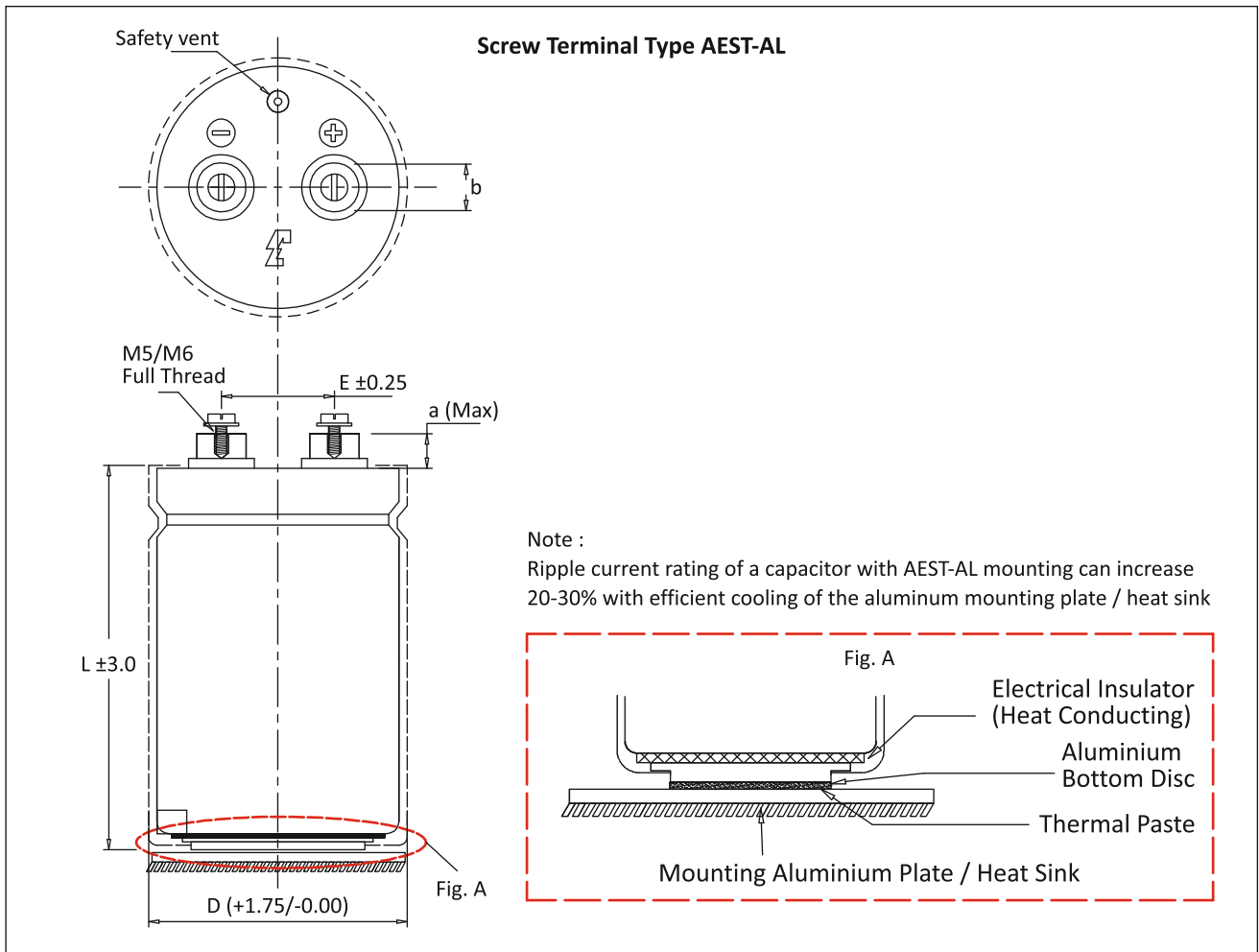
Terminal Style And Dimension With Across Flat Insert



Dimension in mm.

Terminal	D	E	L	a (Max)	b	DT	M	H±1.0
M5	50	22.1	80	5.5	10	13	12	17
M5	50	22.1	105	5.5	10	13	12	17
M5	50	22.1	120	5.5	10	13	12	17
M6	63	28.5	105	6.5	13	15	12	17
M6	63	28.5	120	6.5	13	15	12	17
M6	63	28.5	146	6.5	13	15	12	17
M6	76	31.6	105	6.5	13	15	12	17
M6	76	31.6	120	6.5	13	15	12	17
M6	76	31.6	146	6.5	13	15	12	17
M6	76	31.6	175	6.5	13	15	12	17
M6	76	31.6	220	6.5	13	15	12	17
M6	76	31.6	240	6.5	13	15	12	17
M6	90	32	105	6.5	13	15	12	17
M6	90	32	120	6.5	13	15	12	17
M6	90	32	146	6.5	13	15	12	17
M6	90	32	175	6.5	13	15	12	17
M6	90	32	220	6.5	13	15	12	17
M6	90	32	240	6.5	13	15	12	17
M6	100	32	105	6.5	13	15	12	17
M6	100	32	120	6.5	13	15	12	17
M6	100	32	146	6.5	13	15	12	17
M6	100	32	175	6.5	13	15	12	17
M6	100	32	220	6.5	13	15	12	17
M6	100	32	240	6.5	13	15	12	17
M6	120	41.50	105	6.5	13	15	12	17
M6	120	41.50	120	6.5	13	15	12	17
M6	120	41.50	146	6.5	13	15	12	17
M6	120	41.50	175	6.5	13	15	12	17
M6	120	41.50	220	6.5	13	15	12	17
M6	120	41.50	240	6.5	13	15	12	17

Terminal Style And Dimension



Dimension in mm.

Terminal	D	E	L	a (Max)	b±0.1
M5	63	28.5	105	7.8	12
M5	63	28.5	120	7.8	12
M5	63	28.5	146	7.8	12
M5	76	31.6	105	7.8	12
M5	76	31.6	120	7.8	12
M5	76	31.6	146	7.8	12
M5	76	31.6	175	7.8	12
M5	76	31.6	220	7.8	12
M5	76	31.6	240	7.8	12
M6	76	31.6	105	5.3 *	16
M6	76	31.6	120	5.3 *	16
M6	76	31.6	146	5.3 *	16
M6	76	31.6	175	5.3 *	16
M6	76	31.6	220	5.3 *	16
M6	76	31.6	240	5.3 *	16
M6	90	32	105	5.3 *	16
M6	90	32	146	5.3 *	16
M6	90	32	175	5.3 *	16
M6	90	32	220	5.3 *	16
M6	90	32	240	5.3 *	16

* Low Post Design

Mounting Accessories

Insulating Nylon Nut and Washers for Cans with Bottom Stud

Type : AL-01

Type : AL-02

Type : AL-03

Type : AL-04

Type : AL-05

Vertical Mounting Clamps

CAN	A	B	C	D	E
35	63	15	54	20	10

CAN DIA	A	B	C	D
50	76	33	30	40
63	89	39.5	30	46.5
76	102	46	30	53
90	116	53	30	60

Dimension in mm.

Catalogue No. AEPL PG-2HED-JULY-2020 (Rev 01)

The specification shown herein (page 1 to 6) pertain to the current manufacturing range of the Company. The Company reserves the right to change and /or modify any part of or whole of the specifications as a result of research and development and as may be necessary, without prior notice.