

PG-PED2 - High Pulse 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** : Up to 50φ x 105 mm to 90φ x 220mm
- **Operating temperature range** : - 40°C to +70°C
- **Capacitance** : 680MFD to 6800 MFD
- **Tolerance** : -10% to +20%
- **Feature** : This design of Capacitors can withstand up-to a reverse voltage of 35VDC.
- **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.

Applications

PG-PED2 range is designed for large Instant Energy Discharge application like Laser, X-Ray, Welding, Accelerator, 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-PED2
- 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

1. Discharges	1000000
2. Pulse repetition period	2 sec.
3. Number of pulses with minimum repetition period	200
4. Pause after case 3	60 mins.
5. Average pulse sequence with pauses	20 sec.
6. Pulses per week	5000
7. Charge resistance	10 Ω
8. Discharge resistance	0.5 Ω

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-PED2 - High Pulse Discharge

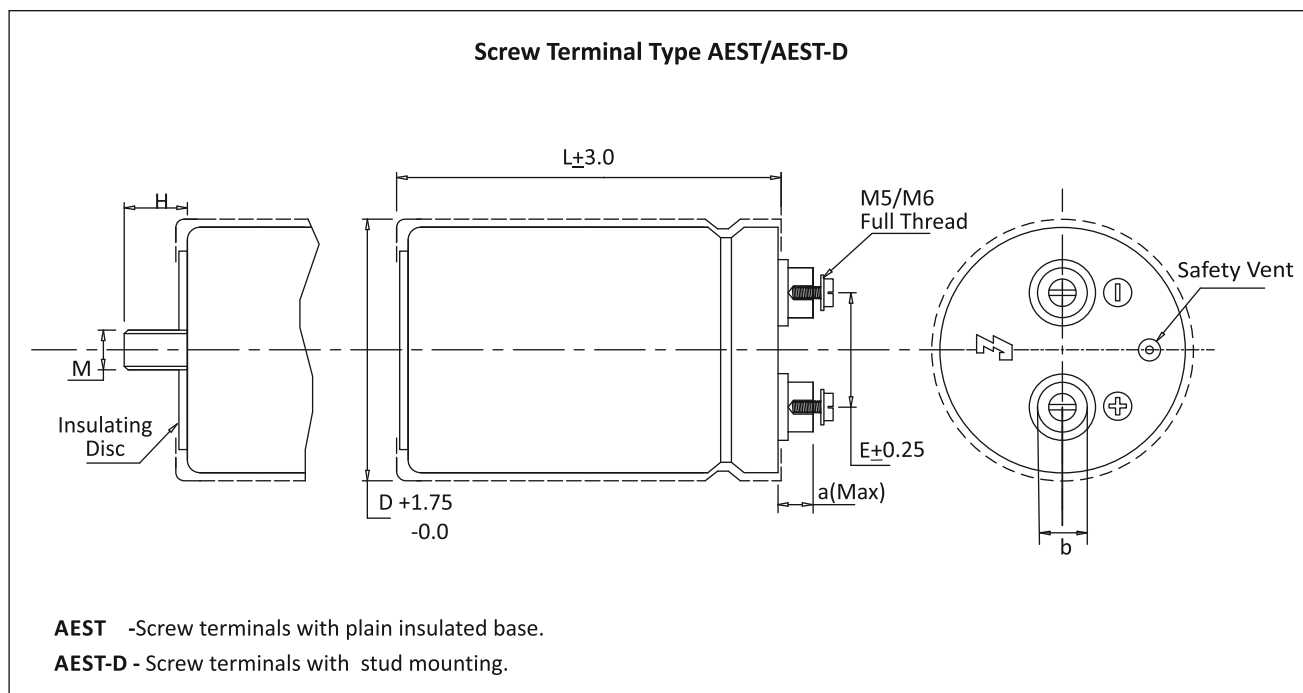
-40°C +70°C

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	680	0.1	1428	50X105	022	SA006800350PD022_ _ _ _ M01
		1000	0.1	2100	63X105	026	SA010000350PD026_ _ _ _ M01
		1200	0.1	2520	63X120	039	SA012000350PD039_ _ _ _ M01
		1500	0.1	3150	76X105	028	SA015000350PD028_ _ _ _ M01
		2200	0.1	4620	76X145	081	SA022000350PD081_ _ _ _ M01
		3300	0.1	6930	76X175	090	SA033000350PD090_ _ _ _ M01
		4700	0.1	9870	90X145	095	SA047000350PD095_ _ _ _ M01
		5600	0.1	11760	90X175	096	SA056000350PD096_ _ _ _ M01
400	440	680	0.1	1632	50X105	022	SA006800400PD022_ _ _ _ M01
		1000	0.1	2400	63X105	026	SA010000400PD026_ _ _ _ M01
		1200	0.1	2880	63X120	039	SA012000400PD039_ _ _ _ M01
		1500	0.1	3600	76X105	028	SA015000400PD028_ _ _ _ M01
		2200	0.1	5280	76X145	081	SA022000400PD081_ _ _ _ M01
		3300	0.1	7920	90X145	095	SA033000400PD095_ _ _ _ M01
		4700	0.1	11280	90X175	096	SA047000400PD096_ _ _ _ M01
		5600	0.1	13440	90X220	094	SA056000400PD094_ _ _ _ M01
450	495	680	0.1	1836	50X105	022	SA006800450PD022_ _ _ _ M01
		1000	0.1	2700	63X105	026	SA010000450PD026_ _ _ _ M01
		1200	0.1	3240	63X120	039	SA012000450PD039_ _ _ _ M01
		1500	0.1	4050	76X105	028	SA015000450PD028_ _ _ _ M01
		2200	0.1	5940	76X145	081	SA022000450PD081_ _ _ _ M01
		3300	0.1	8910	90X145	095	SA033000450PD095_ _ _ _ M01
		4700	0.1	12690	90X175	096	SA047000450PD096_ _ _ _ M01
		5600	0.1	15120	90X220	094	SA056000450PD094_ _ _ _ M01

Custom designed capacitors available

Terminal Style And Dimension With Round Insert

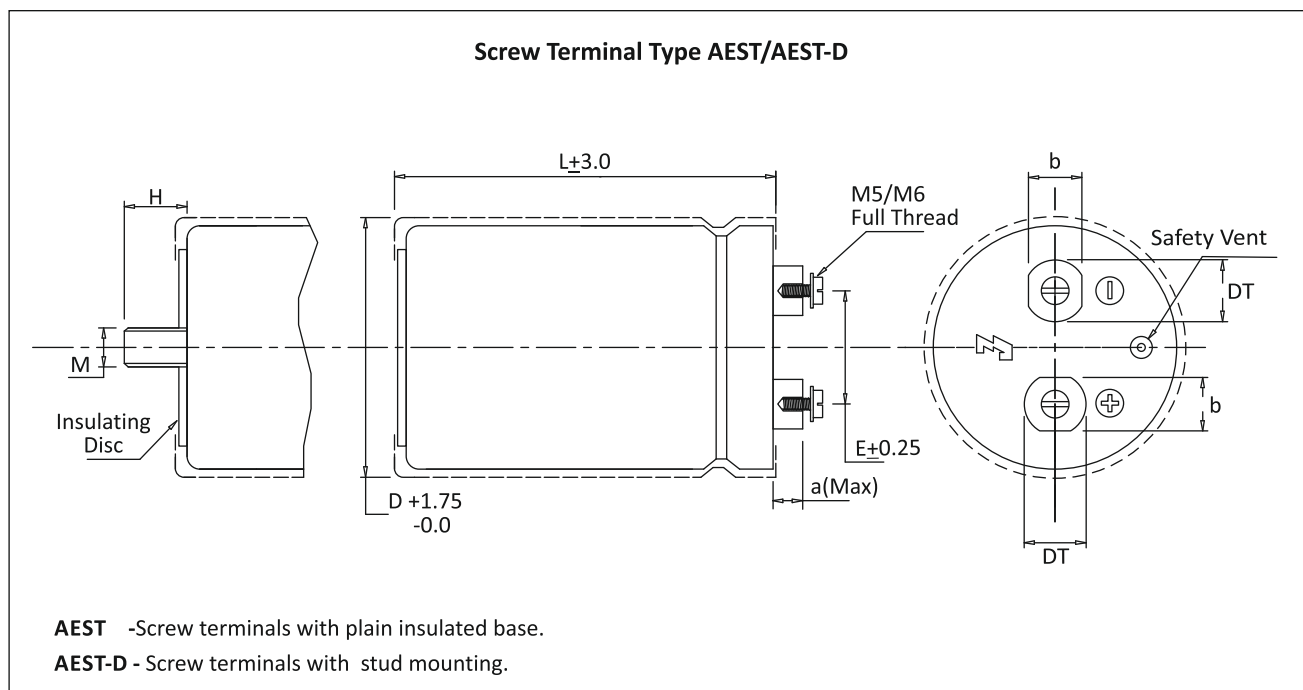


Dimension in mm.

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

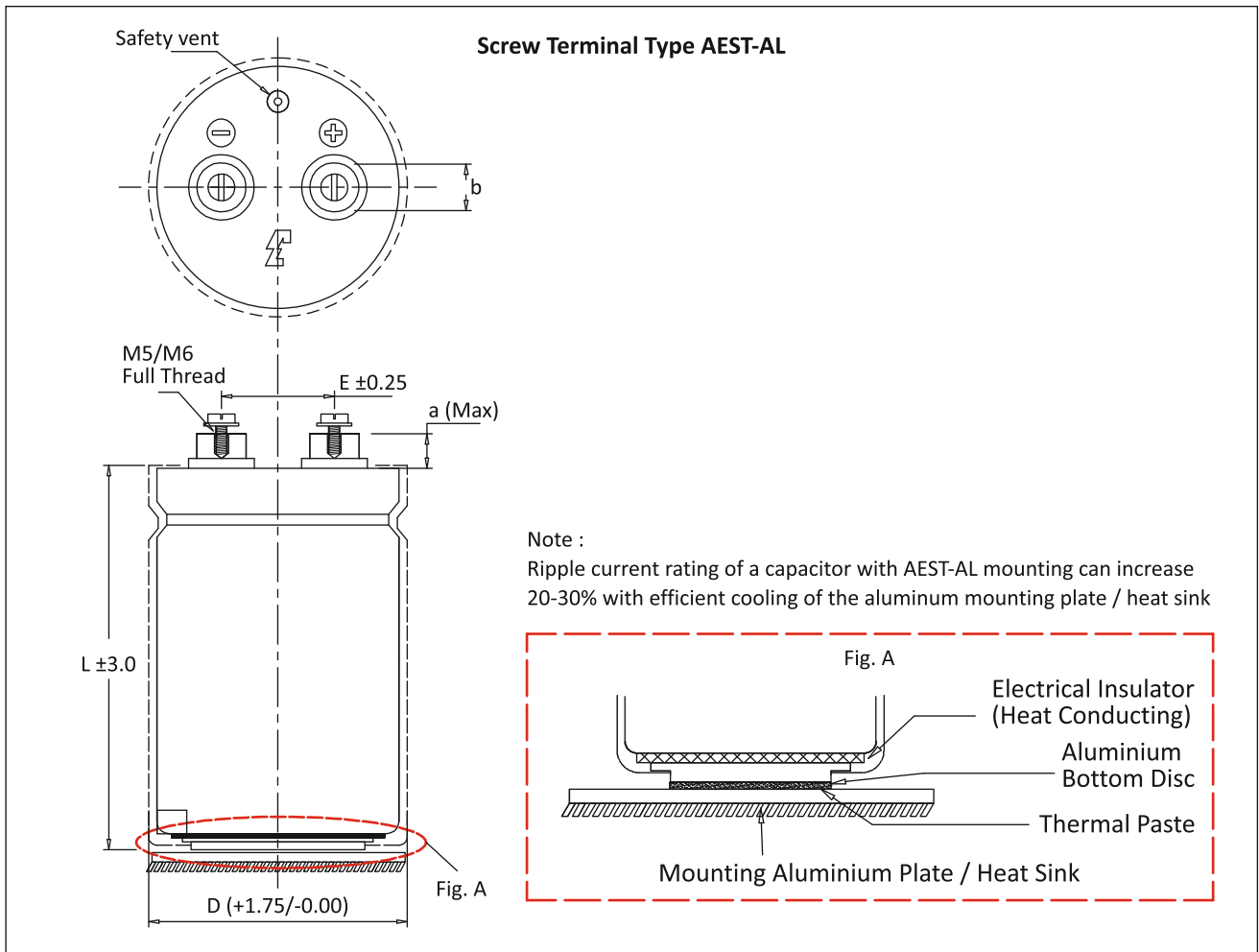
Terminal Style And Dimension With Across Flat Insert



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-PED2-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.