SPECIFICATION

Mode No.：EC1663R-1

Best No: 419028

Description of Goods：MODULAR BOX 24 COMPARTMENTS And Electrolytic Capactior

(1) MODULAR BOX

MATERIAL MATERIAL：ABS

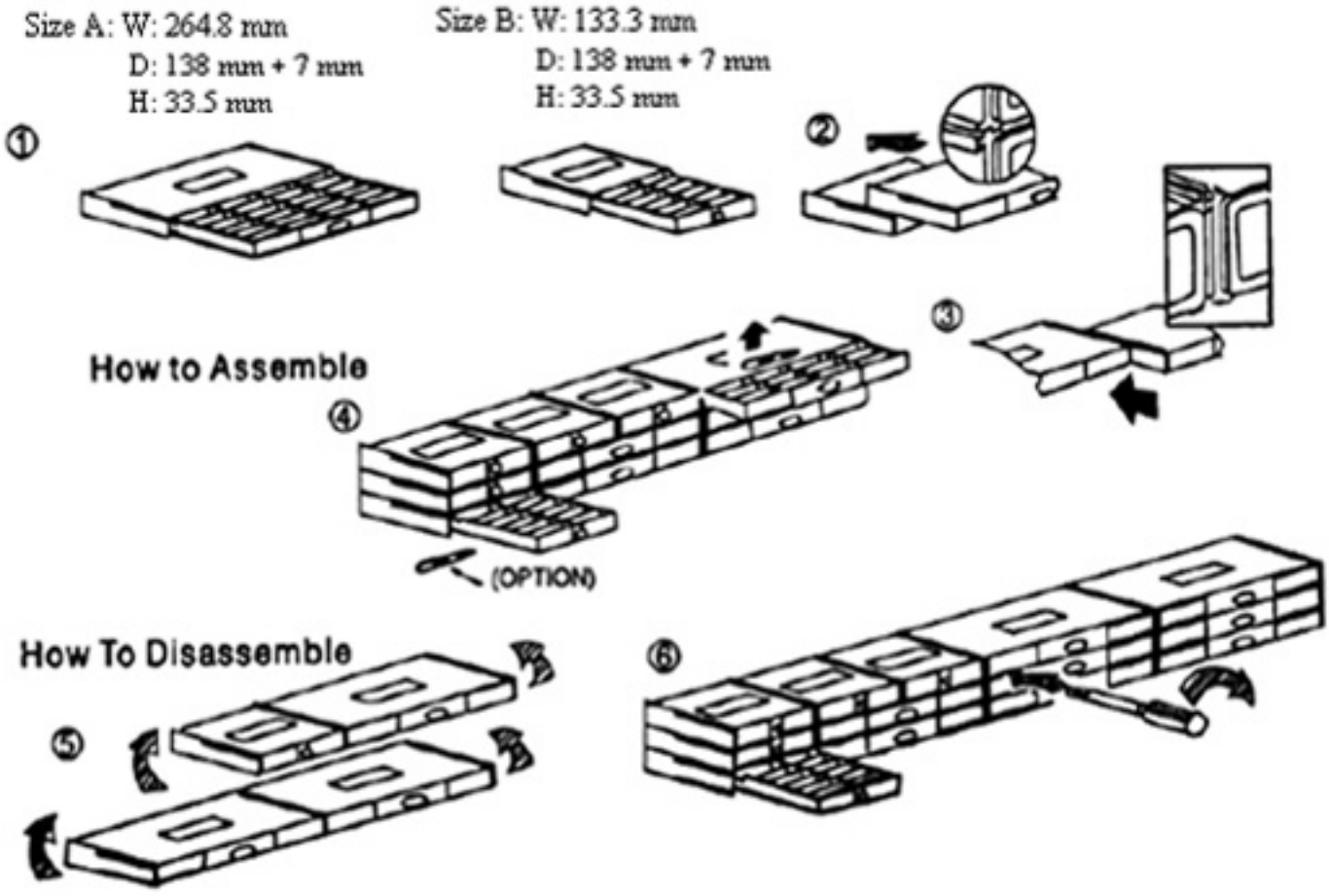
SIZE：W:266MM D:138MM+7MM H:33.5MM

MODULAR BOX 24 COMPARTMENTS (4*6)

SIZE： W:59MM / 4 D:20MM / 6

(2) Label

1. Assembly Drawing



2. Description

Elkosortiment

Radial

3. Content

1000 uF 16V	22 uF 35V	1000 uF 35V	470 uF 63V
470 uF 16V	10 uF 35V	1000 uF 35V	220 uF 63V
220 uF 16V	4.7 uF 50V	470 uF 35V	100 uF 63V
100 uF 16V	2.2 uF 50V	220 uF 35V	47 uF 63V
47 uF 16V	1 uF 50V	100 uF 35V	22 uF 63V
22 uF 16V	2200 uF 16V	47 uF 35V	10 uF 63V

(3) Electrolytic Capactior

No.	Description	Q'ty
1	E/CAP 1uF 50V +/-20%	20
2	E/CAP 10uF 35V +/-20%	20
3	E/CAP 10uF 63V +/-20%	20
4	E/CAP 100uF 16V +/-20%	15
5	E/CAP 100uF 35V +/-20%	12
6	E/CAP 100uF 63V +/-20%	8
7	E/CAP 1000uF 16V +/-20%	5
8	E/CAP 1000uF 35V +/-20%	4
9	E/CAP 2.2uF 50V +/-20%	20
10	E/CAP 22uF 16V +/-20%	20
11	E/CAP 22uF 35V +/-20%	20
12	E/CAP 22uF 63V +/-20%	15
13	E/CAP 220uF 16V +/-20%	10
14	E/CAP 220uF 35V +/-20%	7
15	E/CAP 220uF 63V +/-20%	5
16	E/CAP 2200uF 16V +/-20%	2
17	E/CAP 4.7uF 50V +/-20%	20
18	E/CAP 47uF 16V +/-20%	20
19	E/CAP 47uF 35V +/-20%	15
20	E/CAP 47uF 63V +/-20%	10
21	E/CAP 470uF 16V +/-20%(D8x12)	5
22	E/CAP 470uF 35V +/-20%(D10x16)	5
23	E/CAP 470uF 63V +/-20%	2

(4) Packing Material

1. Inner box 1/10
   SIZE=275Lx155Wx360H mm

2. Master Carton
   SIZE=333Lx293Wx381H mm

3. Shringking Bag
   SIZE=Full

Aluminum Electrolytic Capacitance

SPECIFICATION

Product type	SR Series		

1. Operation Temperature Range

   6.3~100VDC -40~+85℃

   160~450VDC -25~+85℃

2. Capacitance Tolerance

   Capacitance tolerance should be within the range of ±20% which is measured at 120HZ, 25℃.

3. Leakage Current

   The formula of the leakage current is specified as following:

   6.3~100VDC $I \leqq 0.01CV$ or 3 (μA)

   (After 2 minutes applying the DC working voltage)

   160~450VDC $I \leqq 0.03CV + 10$(μA)

   (After 5 minutes applying the DC working voltage)

   Where I: Leakage Current (μA) at 25℃

   C: Rated Capacitance (μF)

   V: Working Voltage (V)

4. Rated Voltage and Surge Voltage

   WV: Working Voltage

   SV: Surge Voltage

WV	6.3	10	16	25	35	40	50	63	100	160	200	250	350	400	450
SV	8	13	20	32	44	50	63	79	125	200	250	300	400	450	500

5. Dissipation Factor

   Dissipation factor (tan δ) at 120Hz, 25℃ shall not exceed the values given in the table below.

WV	6.3	10	16	25	35	40	50	63	100	160	200	250	350	400	450
tan δ	0.25	0.20	0.17	0.15	0.12	0.12	0.10	0.10	0.10	0.15	0.15	0.15	0.20	0.20	0.2

For capacitance exceeding 1000uF. add 0.02 Per increment of 1000uF.

6. Temperature Characteristics

The comparison of impedance between +25℃ and -25℃; +25℃ and -40℃ of the capacitor shall satisfy following requirements.

WV	6.3	10	16	25	35	40	50	63	100	160	200	250	350	400	450
-25℃/+25℃	4	4	3	3	2	2	2	2	2	8	8	8	12	16	16
-40℃/+25℃	10	8	6	4	3	3	3	3	3	-	-	-	-	-	-

Impedance ratio at 120Hz

7. Load Test

After 2000 hours application of w.v. at +85℃, the capacitor shall meet the following limits.

Capacitance Change	≦±20% of initial value
Tan δ	≦150% of initial specified value
Leakage Current	≦initial specified value

8. Shelf Test

After 1000 hours, no voltage applied at +85℃, the capacitor shall meet the following limits.

Capacitance Change	≦±20% of initial value
Tan δ	≦150% of initial specified value
Leakage Current	≦200% of initial specified value

9. Lead Wire Pull Test

a). That with diameter of lead wire less than 0.5mm and case size less than 10mm be capable of withstanding a steady pull of 0.5kg up for a period of 10 seconds.

b). That with diameter of lead wire between 0.6mm~0.8mm be capable of withstanding a steady pull of 1.0kg up for a period of 10 seconds.

c). That with diameter of lead wire larger than 0.8mm be capable of withstanding a steady pull of 2.5kg up for a period of 10 seconds.

Diameter of Lead Wire(mm)	Load(kg)
0.5mm or diameter of case size less than 10mm	0.5up
Between 0.6mm~0.8mm	1.0up
Large than 0.8mm	2.5up

10. Solderability Test

The section from the base to 2.0mm of the capacitor terminal must be immersed in 235±5℃ liquid tin for 2.0±0.5 seconds. Then, after removing, the liquid tin must at here to all section.

11. Solder Heat Resistance

The section from the base to 4±0.8mm of the capacitor terminal must be immersed in 260±10℃ liquid tin 10±1 seconds. Then, after removing in normal temperature for 2-4 hours, test the capacitance. The capacitance change is ≦ 10%.

12. Vibration Proof

a). The capacitor under test shall be mounted by means of mounting device specified

RADIAL TYPE

DIMENSION	QTY IN PLASTIC BAG	QTY IN CARTON	N.W.	G.W.
5 × 11 mm	500 PCS	50,000 PCS	22 Kgs	24 Kgs
6.3 × 11 mm	500 PCS	40,000 PCS	24 Kgs	26 Kgs
8 × 12 mm	500 PCS	25,000 PCS	26 Kgs	28 Kgs
8 × 14 mm	500 PCS	20,000 PCS	24 Kgs	26 Kgs
8 × 16 mm	500 PCS	20,000 PCS	24 Kgs	26 Kgs
10 × 12 mm	500 PCS	15,000 PCS	23 Kgs	25 Kgs
10 × 16 mm	500 PCS	12,500 PCS	25 Kgs	27 Kgs
10 × 20 mm	250 PCS	10,000 PCS	24 Kgs	26 Kgs
10 × 24 mm	200 PCS	8,000 PCS	24 Kgs	26 Kgs
13 × 20 mm	200 PCS	6,000 PCS	22 Kgs	24 Kgs
13 × 25 mm	200 PCS	5,000 PCS	25 Kgs	27 Kgs
16 × 26 mm	100 PCS	3,500 PCS	26 Kgs	28 Kgs
16 × 31 mm	100 PCS	2,500 PCS	24 Kgs	26 Kgs
16 × 35 mm	100 PCS	2,500 PCS	28 Kgs	30 Kgs
18 × 35 mm	50 PCS	2,000 PCS	26 Kgs	28 Kgs
18 × 41 mm	50 PCS	2,000 PCS	28 Kgs	30 Kgs
20 × 35 mm	50 PCS	1,500 PCS	24 Kgs	26 Kgs
20 × 41 mm	50 PCS	1,500 PCS	25 Kgs	27 Kgs
22 × 36 mm	50 PCS	1,500 PCS	24 Kgs	26 Kgs
22 × 42 mm	50 PCS	1,000 PCS	19 Kgs	21 Kgs
25 × 43 mm	25 PCS	750 PCS	21 Kgs	23 Kgs

***REMARKS: BY AUTO PACKING MACHINE PACKED 1,000PCS/PER PLASTIC BAG**

AIXAL TYPE

DIMENSION	QTY IN PLASTIC BAG	QTY IN CARTON	N.W.	G.W.
5 × 13 mm	500 PCS	25,000 PCS	16 Kgs	18 Kgs
6 × 13 mm	500 PCS	25,000 PCS	18 Kgs	20 Kgs
6 × 16 mm	500 PCS	15,000 PCS	18 Kgs	20 Kgs
8 × 16 mm	500 PCS	12,500 PCS	19 Kgs	21 Kgs
8 × 20 mm	500 PCS	12,500 PCS	19 Kgs	21 Kgs
10 × 16 mm	200 PCS	8,000 PCS	16 Kgs	18 Kgs
10 × 21 mm	200 PCS	8,000 PCS	18 Kgs	20 Kgs
10 × 24 mm	200 PCS	8,000 PCS	18 Kgs	20 Kgs
13 × 21 mm	200 PCS	5,000 PCS	18 Kgs	20 Kgs
13 × 24 mm	200 PCS	4,000 PCS	16 Kgs	18 Kgs
16 × 28 mm	100 PCS	2,500 PCS	17 Kgs	19 Kgs
16 × 33 mm	50 PCS	2,000 PCS	18 Kgs	20 Kgs
16 × 36 mm	50 PCS	2,000 PCS	18 Kgs	20 Kgs
18 × 36 mm	50 PCS	1,750 PCS	16 Kgs	18 Kgs
20 × 36 mm	50 PCS	1,000 PCS	14 Kgs	16 Kgs
22 × 32 mm	50 PCS	1,000 PCS	19 Kgs	21 Kgs
22 × 42 mm	25 PCS	1,000 PCS	24 Kgs	26 Kgs
25 × 54 mm	25 PCS	750 PCS	17 Kgs	19 Kgs

SUPER MINI TYPE

DIMENSION	QTY IN PLASTIC BAG	QTY IN CARTON	N.W.	G.W.
4 × 7 mm	1000 PCS	75,000 PCS	15 Kgs	17 Kgs
5 × 7 mm	1000 PCS	60,000 PCS	19 Kgs	21 Kgs
6.3 × 7 mm	1000 PCS	50,000 PCS	24 Kgs	26 Kgs
8 × 7 mm	500 PCS	30,000 PCS	20 Kgs	22 Kgs
8 × 9 mm	500 PCS	30,000 PCS	20 Kgs	22 Kgs

MICRO MINI TYPE

DIMENSION	QTY IN PLASTIC BAG	QTY IN CARTON	N.W.	G.W.
3 × 5 mm	1000 PCS	125,000 PCS	16 Kgs	18 Kgs
4 × 5 mm	1000 PCS	100,000 PCS	21 Kgs	23 Kgs
5 × 5 mm	1000 PCS	75,000 PCS	20 Kgs	22 Kgs
6.3 × 5 mm	1000 PCS	60,000 PCS	24 Kgs	26 Kgs
8 × 5 mm	1000 PCS	50,000 PCS	26 Kgs	28 Kgs

REMARKS: 1) THERE ARE FIEVE PAPER BOXES IN A CARTON
2) CARTON'S DIMENSION: 420×340×390mm

TAPING OF RADIAL LEADS

Item	Symbol	Case Size													Tolerance	Remark
		4×5	5×5	6.3×5	8×5	4×7	5×7	6.3×7	8×7	5×11	6.3×11	8×12	10×12	10×16	10×20	
Lead wire diameter	d	0.45						0.5						0.6		±0.05	
Body height	A	6.0				8.5				12.5			14.5	17.5	21.5	max	
Interval of bodies	P	12.7														±1.0	
Interval of punched holes	P0	12.7														±0.2	
Distance between holes and lead wire	P1	3.85														±0.7	Fig1. Fig4.
		5.35	5.1			5.35	5.1			5.1							Fig2.
			5.35	5.1	5.1		5.35	5.1	4.6	5.35	5.1	4.6					Fig3.
Distance between holes and bodies	P2	6.35														±1.0	
Distance between lead and lead	F	5.0														+0.8 -0.2	Fig1. Fig4
		2.0	2.5			2.0	2.5			2.5							Fig2.F=5.0 +0.5 -1.0
			2.0	2.5	2.5		2.0	2.5	3.5	2.0	2.5	3.5					Fig3.F=5.0 +0.5 -1.0
Base tape width	W	18.0														±0.5	
Adhesive tape width	W0	12.5														min	
Deviation between holes and base tape	W1	9.0														±0.5	
Deviation between adhesive and base tape	W2	1.5														max	
Distance between body bottom and tape center	H	17.5								18.5		20.0	18.5			±0.75	Fig1. Fig4
		17.5								18.5		18.5					Fig2. Fig3
Lead wire clinched height	H0	16.0														±0.5	
Distance between body top and tape center	H1	24.5				27.5				32.5			33.0	36.0	41.0	max	
Punched hole diameter	D0	4.0														±0.3	
Length of not good lead slit	L	11.0														max	
Base and adhesive tape thickness	t	0.7														±0.3	
Deviation of body alignment	Δh	0														±2.0	
Deviation of body alignment	Δh1	0														±1.0	

Fig 1. (ø4~ø8)

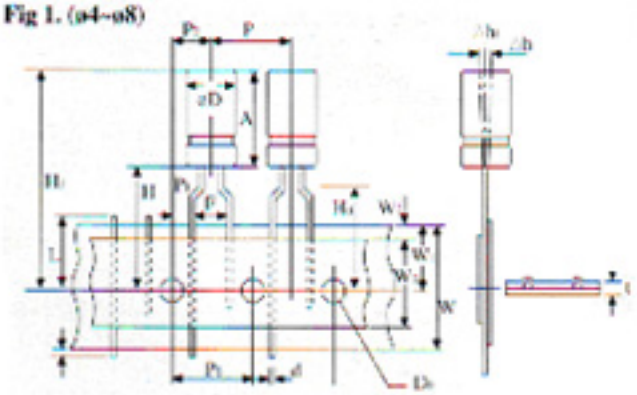


Fig 2. (ø4~ø5)

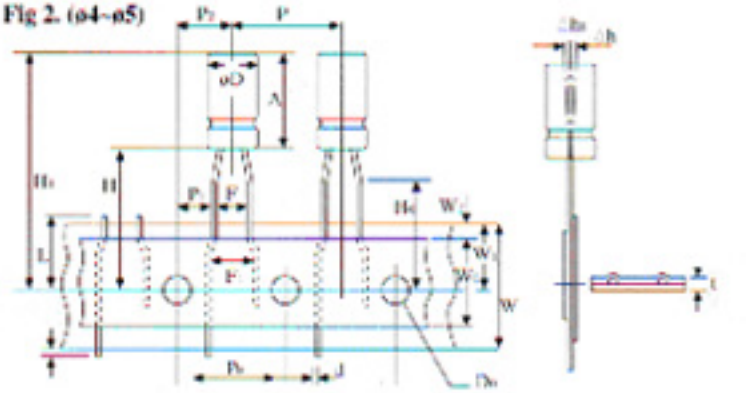


Fig 3. (ø5~ø8)

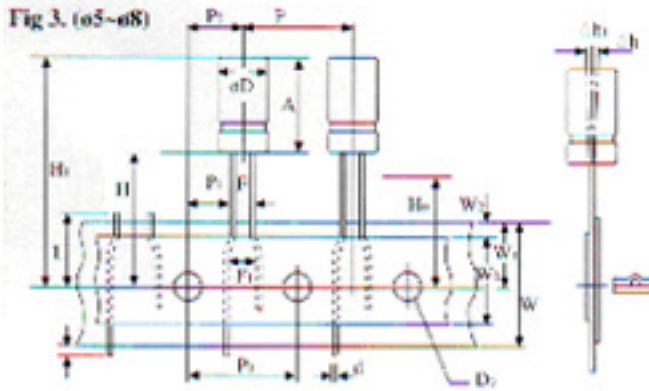
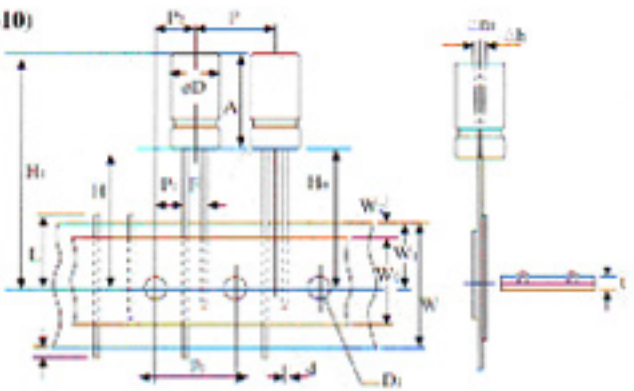
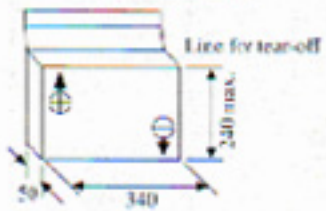


Fig 4. (ø10)



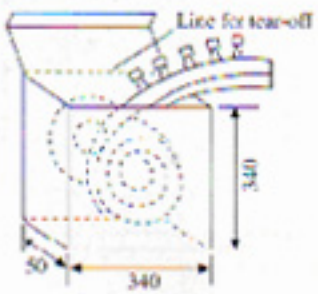
PACKING AND OTY

1. AMMO PACKING



Case Size	Packing		Weight		Carton Dimension
	Inner Box	Carton	N.W.	G.W.	
4ø	2,500pcs	25,000pcs	9kgs	14kgs	490 x 340 x 260mm
5ø	2,000pcs	20,000pcs	9kgs	14kgs	490 x 340 x 260mm
6.3ø	1,500pcs	15,000pcs	10kgs	15kgs	490 x 340 x 260mm
8ø	1,000pcs	10,000pcs	10kgs	15kgs	490 x 340 x 260mm
10ø	700pcs	7,000pcs	10kgs	15kgs	490 x 340 x 260mm

2. REEL PACKING



Case Size	Packing		Weight		Carton Dimension
	Inner Box	Carton	N.W.	G.W.	
4ø	3,000pcs	15,000pcs	6kgs	10kgs	350 x 350 x 260mm
5ø	2,400pcs	12,000pcs	9kgs	13kgs	350 x 350 x 260mm
6.3ø	2,000pcs	10,000pcs	7kgs	11kgs	350 x 350 x 260mm
8ø	1,600pcs	8,000pcs	8kgs	12kgs	350 x 350 x 260mm
10ø	600pcs	3,000pcs	8kgs	12kgs	350 x 350 x 260mm