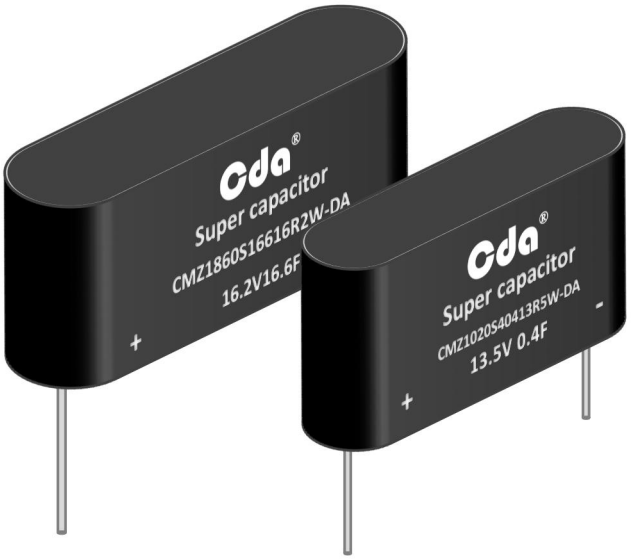
CMZ(Customized)Series

Customized Module Series

www.cda-cap.com

FEATURES

- Unique slim profile design /Lead Type Terminal
- Passive linear voltage balanced cells
- Fast charge time
- Maintenance-free backup
- Green solution vs. batteries
- RoHS compliant



APPLICATIONS

- Automatic meter readers
- Automotive subsystems
- Backup power for safe shutdown requirements
- Battery-powered tools and handheld electronic devices
- Data deduplication/Networking last gasp/RAID storage/SSD
- Wireless transmission/Servers

GENERAL SPECIFICATIONS

Item	Performance
Storage temperature	-40°C to +65°C
Capacitance range	0.41F to 30F
Rated voltage	8.1 VDC / 32.4 VDC
Temperature characteristics	Capacitance change: Within ±5% of initial measured value at +25°C (-40°C to +65°C) Internal resistance: Within ±50% of initial measured value at +25°C (at -40°C)
Endurance (At rated voltage & max. operating temp)	After 1000 hours: Capacitance change: ±30% of initial rated value Internal resistance: Within 2 times of initial specified value
Projected load life （At rated voltage 25℃）	After 10 years: Capacitance change: ±30% of initial rated value Internal resistance: Within 2 times of initial specified value
Projected cycle life (From rated voltage to 1/2 rated voltage at 25°C)	After 500,000 cycles: Capacitance change: Within ±30 % of initial rated value Internal resistance: Within 2 times of initial specified value
Shelf life	After 2 years at 25°C without load, the capacitor shall meet the specified endurance limits.

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Spec. Date:2021-07-05

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PART NUMBER SYSTEM

CMZ	1860	S	106	32R4	W	DA

Series
CMZ

Unit size		
Code	D	L
1030	10	30
1325	13	25
1630	16	30
1860	18	60
...	...	...

tolerance	
Code	Tol(%)
S	-20~+50
M	-20~+20
R	0~+30
V	-10~+30
X	-0~+100

Capacitance	
Code	Cap(F)
106	10.0
116	11.0
206	20.0
306	30.0
...	...

Rated Voltage	
Code	Vol(V)
8R1	8.1
10R8	10.8
13R5	13.5
16R2	16.2
...	...

Code	Circuit balance
W	Without balance
P	Passive balance
A	Active balance

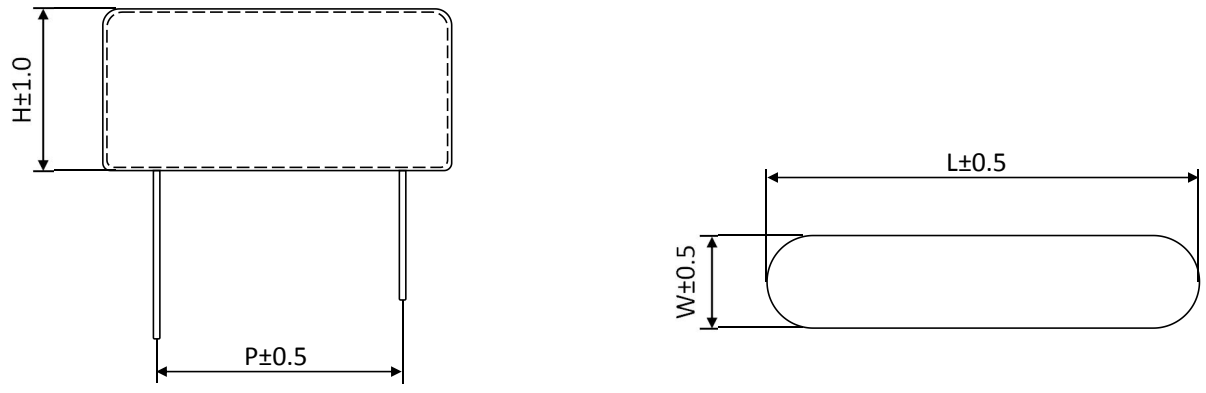
Code	Type
DA	Connection box
LA	Wire lead
WA	Original pad

SAFETY AND CERTIFICATIONS

Test standard	IEC62391-1 (cells)
Warnings	Do not ovevoltage, do not reverse polarity
Shipping	No restrictions per UN 3499， UN 3508
Environmental compliance	RoHS, REACH,,HF lead free, halogen free
Material reports	MSDS

DIMENSIONS

Terminal LA type:



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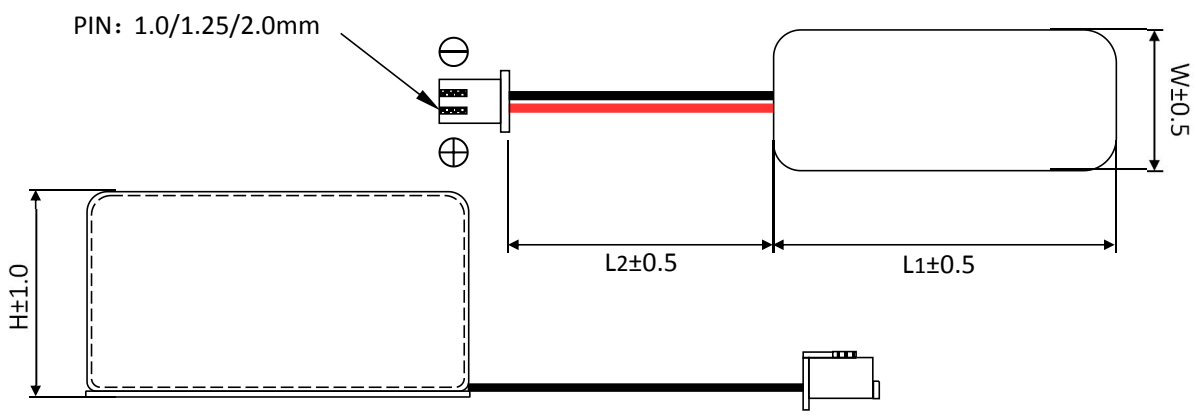
Spec. Date:2021-07-05

STANDARD PRODUCTS(8.1V/10.8V)

Part Number	Rated Voltage (V)	Rated Cap (F)	GMV (F)	Dimensions (mm)			ESR AC (mΩ) (1 KHz)	ESR DC (mΩ) (1 KHz)	Peak Current(A)	Leakage Current (72hrs/mA)
				W	L	H				
CMZ1030S3358R1W-DA	8.1	3.33	3	11	31	33	135	204	8.06	0.030
CMZ1025S3358R1W-DA		3.33	3	11	31	28	180	270	6.89	0.033
CMZ1325S6658R1W-DA		6.66	6	14	40	28	120	180	11	0.050
CMZ1625S7358R1W-DA		7.33	6.6	17	49	28	75	114	17.42	0.068
CMZ1630S1168R1W-DA		11.33	10	17	49	33	60	90	23.05	0.080
CMZ1346S1368R1W-DA		13.33	12	14	40	49	60	90	24.55	0.080
CMZ1840S1668R1W-DA		16.66	14	19	55	43	48	72	30.68	0.105
CMZ1840S2768R1W-DA		27.33	25	19	55	43	54	90	40.15	0.130
CMZ1025S25510R8W-DA	10.8	2.5	2.2	11	41	28	240	360	7.11	0.033
CMZ1326S45510R8W-DA		4.5	4	14	53	29	160	240	12.05	0.050
CMZ1625S55510R8W-DA		5.5	4.9	17	65	28	100	152	18.20	0.068
CMZ1630S70510R8W-DA		7	6.3	17	65	33	80	120	21.32	0.075
CMZ1635S85510R8W-DA		8.5	7.6	17	65	38	80	120	23.05	0.080
CMZ1346S10610R8W-DA		10	9	14	53	49	80	120	25.05	0.080
CMZ1835S11610R8W-DA		11.25	10	19	73	38	72	108	25.96	0.088
CMZ1840S20610R8W-DA		20.5	18	19	73	43	72	120	41.05	0.130
CMZ1860S25610R8W-DA		25	22	19	73	63	52	80	45.76	0.240
CMZ1860S30610R8W-DA		30	27	19	73	63	52	80	48.50	0.280

*NOTE: GMV = Guaranteed Minimum Value.

Terminal DA type:



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Spec. Date:2021-07-05

STANDARD PRODUCTS(13.5V/16.2V)

Part Number	Rated Voltage (V)	Rated Cap (F)	GMV (F)	Dimensions (mm)			ESR AC (mΩ) (1 KHz)	ESR DC (mΩ) (1 KHz)	Peak Current(A)	Leakage Current (72hrs/mA)
				W	L	H				
CMZ1020S40413R5W-DA	13.5	0.4	0.36	11	51	23	450	675	4.03	0.020
CMZ1020S10513R5W-DA		1	0.9	11	51	23	375	565	4.32	0.015
CMZ1030S20513R5W-DA		2	1.8	11	51	33	225	340	8.06	0.030
CMZ1320S30513R5W-DA		3	2.7	14	66	23	225	340	10.06	0.040
CMZ1325S40513R5W-DA		4	3.6	14	66	28	200	300	11.68	0.050
CMZ1335S44513R5W-DA		4.4	3.9	14	66	38	150	225	15.88	0.060
CMZ1625S50513R5W-DA		5	4.5	17	81	28	125	190	17.42	0.068
CMZ1630S56513R5W-DA		5.6	5	17	81	33	100	150	21.32	0.075
CMZ1346S68513R5W-DA		6.8	6.1	14	66	49	100	150	23.02	0.080
CMZ1346S80513R5W-DA		8	7.2	14	66	49	100	150	24.55	0.080
CMZ1835S90513R5W-DA		9	8.1	19	91	38	90	135	30.92	0.110
CMZ1840S12613R5W-DA		12	11	19	91	43	75	115	34.47	0.150
CMZ1840S16613R5W-DA		16.4	14	19	91	43	90	150	41.05	0.130
CMZ1860S20613R5W-DA		20	18	19	91	63	65	100	45.76	0.240
CMZ1860S24613R5W-DA		24	21	19	91	63	65	100	48.50	0.280
CMZ1025S16516R2W-DA	16.2	1.66	1.4	11	61	28	360	540	7.11	0.030
CMZ1320S25516R2W-DA		2.5	2.2	14	79	23	270	408	10.06	0.040
CMZ1330S36516R2W-DA		3.66	3.2	14	79	33	210	318	13.17	0.055
CMZ1630S46516R2W-DA		4.66	4.1	17	97	33	120	180	21.32	0.075
CMZ1635S56516R2W-DA		5.66	5	17	97	38	120	180	23.05	0.080
CMZ1835S58516R2W-DA		5.83	5.2	19	109	38	108	162	25.96	0.088
CMZ1346S66516R2W-DA		6.66	5.9	14	79	43	120	180	24.55	0.080
CMZ1840S75516R2W-DA		7.5	6.7	19	109	43	96	144	30.68	0.105
CMZ1840S10616R2W-DA		10	9	19	109	43	90	138	34.47	0.150
CMZ1840S13616R2W-DA		13.66	12	19	109	43	108	180	41.02	0.130
CMZ1860S16616R2W-DA		16.6	15	19	109	63	78	120	45.76	0.240
CMZ1860S20616R2W-DA		20	18	19	109	63	78	120	48.50	0.280

*NOTE: GMV = Guaranteed Minimum Value.

STANDARD PRODUCTS(21.6V/27.0V)

Part Number	Rated Voltage (V)	Rated Cap (F)	GMV (F)	Dimensions (mm)			ESR AC (mΩ) (1 KHz)	ESR DC (mΩ) (1 KHz)	Peak Current(A)	Leakage Current (72hrs/mA)
				W	L	H				
CMZ1016S50421R6W-DA	21.6	0.5	0.4	22	41	20	720	1080	4.03	0.020
CMZ1020S60421R6W-DA		0.62	0.5	22	41	23	600	904	4.32	0.015
CMZ1030S12521R6W-DA		1.25	1.1	22	41	33	360	544	8.06	0.030
CMZ1330S27521R6W-DA		2.75	2.4	28	53	33	280	424	13.17	0.055
CMZ1630S35521R6W-DA		3.5	3.1	34	65	33	160	240	21.32	0.075
CMZ1630S42521R6W-DA		4.25	3.8	34	65	33	160	240	23.05	0.080
CMZ1346S50521R6W-DA		5	4.5	28	53	49	160	240	24.55	0.080
CMZ1840S56521R6W-DA		5.62	5	38	73	43	128	192	30.68	0.105
CMZ1840S75521R6W-DA		7.5	6.7	38	73	43	120	184	34.47	0.150
CMZ1840S10621R6W-DA		10.25	9.2	38	73	43	144	240	41.02	0.130
CMZ1860S12621R6W-DA		12.5	11	38	73	63	104	160	45.76	0.240
CMZ1860S15621R6W-DA		15	13	38	73	63	104	160	48.50	0.280
CMZ1020S50427R0W-DA	27.0	0.5	0.45	22	51	23	600	900	5.80	0.020
CMZ1030S10527R0W-DA		1	0.9	22	51	33	450	680	8.06	0.030
CMZ1330S22527R0W-DA		2.2	2	28	66	33	350	530	13.17	0.055
CMZ1625S22527R0W-DA		2.2	2	34	81	28	250	380	17.42	0.068
CMZ1630S28527R0W-DA		2.8	2.5	34	81	33	200	300	21.32	0.075
CMZ1630S34527R0W-DA		3.4	3	34	81	33	200	300	23.05	0.080
CMZ1346S40527R0W-DA		4.0	3.6	28	66	49	200	300	24.55	0.080
CMZ1840S45527R0W-DA		4.5	4	38	91	43	160	240	30.68	0.105
CMZ1840S60527R0W-DA		6	5.4	38	91	43	150	230	34.47	0.150
CMZ1840S82527R0W-DA		8.2	7.3	38	91	43	180	300	41.02	0.130
CMZ1860S10627R0W-DA		10	9	38	91	63	130	200	45.76	0.240
CMZ1860S12627R0W-DA		12	11	38	91	63	130	200	48.50	0.280

***NOTE: GMV = Guaranteed Minimum Value.**

STANDARD PRODUCTS(32.4V)

Part Number	Rated Voltage (V)	Rated Cap (F)	GMV (F)	Dimensions (mm)			ESR AC (mΩ) (1 KHz)	ESR DC (mΩ) (1 KHz)	Peak Current(A)	Leakage Current (72hrs/mA)
				W	L	H				
CMZ1020S41432R4W-DA	32.4	0.41	0.36	22	61	23	900	1356	5.29	0.020
CMZ1030S83432R4W-DA		0.83	0.74	22	61	33	540	816	8.06	0.030
CMZ1330S18532R4W-DA		1.83	1.6	28	79	33	420	636	13.17	0.055
CMZ1630S23532R4W-DA		2.33	2	34	97	33	240	360	21.32	0.075
CMZ1630S28532R4W-DA		2.83	2.5	34	97	33	240	360	23.05	0.080
CMZ1346S33532R4W-DA		3.33	3	28	79	49	240	360	24.55	0.080
CMZ1840S37532R4W-DA		3.75	3.5	38	109	43	192	288	30.68	0.105
CMZ1840S50532R4W-DA		5	4.5	38	109	43	180	276	34.47	0.150
CMZ1840S68532R4W-DA		6.83	6.1	38	109	43	216	360	41.02	0.130
CMZ1860S83532R4W-DA		8.33	7.4	38	109	63	156	240	45.76	0.240
CMZ1860S10632R4W-DA		10	9	38	109	63	156	240	48.50	0.280

***NOTE: GMV = Guaranteed Minimum Value.**

DESCRIPTION OF MODULE DESIGN

Cells separation	
Cells can be classified by capacitance, internal resistance, leakage current and self discharge to improve precision of the group matching, so as to improve the reliability and stability of the module.	
Circuit design	
Function:	design by client's requirement.
Property:	design by client's applicat load characteristic.
Balance mode:	active and passtive.
Detection:	cell's over-charge test, over temperature test, counter charging test, etc.
Communication mode:	designed according to client's requirement, such as mode of SPI、RS232、 RS485、CAN、12C、SMBUS ethernet or optical fiber communication.
PCB:	sturdy, firm, low internal resistance, high overcurrent, good property of heat dissipation
Additional function:	monitoring voltage of every parallel module, calculate surplus capacitance of module, and even surplus capacitance and conditions of each cell.
Environmental compliance	RoHS, ,MSDS,REACH, lead free, halogen free No restrictions, per UN3499 with all cells <10 watt-hours