

CAEAC

for defense



- Long-life product, with reliability index, five-level failure rate ($\lambda \leq 1 \times 10^{-5}$).
- Screw construction, full range, available for type A and type B fixing, the size can also be customized according to needs.
- It meets the environmental requirements of the national military standard GJB603A-2021 such as vibration, low pressure, and humidity resistance
- It is suitable for energy storage and filtering in the electronic unified circuit of aerospace, aviation, cold, high altitude and ocean.

Main technical parameters:

Item	characteristic					
Operating temperature range	-40℃~+105℃					
Rated operating voltage range	10V~450V					
Nominal capacitance range	470~820000μF					
Allowable deviation of nominal capacitance	M（-20%~+20%） （25℃，100Hz）					
DC leakage current（25℃，5min）	I≤0.01C _R U _R （μA）or 15mA（whichever is less） C _R : Nominal capacitance（μF）; U _R : Rated voltage（V）					
Loss tangent tgδ（max）	For details, please refer to the "List of Product Specifications and Technical Parameters"（25℃，100Hz）					
Temperature characteristics （100Hz, impedance ratio）	U _R (V)	10~35	25~100	160~250	350~450	
	Z _{-40℃} /Z _{+25℃}	≤10	≤8	≤12	≤15	
Rated ripple current	For details, please refer to the "List of Product Specifications and Technical Parameters"（105℃，100Hz）					
Durability（High Temperature Test）	The rated voltage with ripple current is applied at 105℃ for 5000h, and after recovery for 24h, the electrical performance is tested at room temperature（25℃±5℃），and its electrical performance conforms to:					
	Rate of change in capacitance		≤± 20% of the initial measurement			
	DC leakage current		≤ initial prescriptive value			
	The loss angle is tangent		≤ 200% of the initial measurement			
Store at high temperatures	Left at 105℃ for 1000h, after the test, the normal temperature（25℃±5℃）was restored to the test, and its electrical properties conformed to:					
	Rate of change in capacitance		≤± 20% of the initial measurement			
	DC leakage current		≤ 200% of the initial specified value			
	The loss angle is tangent		≤ 200% of the initial measurement			

Execution standard number: Q/MN20089—2023 GJB603A—2011

Outline drawing and size table (mm)

Type A (Basic type, fixed mounting ring)

D	F±1.0	Hexagon screws	The maximum torque is N.m
35	13	M5×10	1.13
50	20		
63.5	25		
76	30		
90	32		

Type B (bottom screw fixed, please specify when ordering)

D	d	h	The maximum torque is N.m
35	MB	12	4
≥51	M12	16	10

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List of product specifications and technical parameters

Rated voltage (V)	capacity (μF)	Dimensions D×L (mm)	tgδ (100Hz)	Ripple current (mA,ms)
10 1A	56000	35×60	0.80	6.2
	68000	35×80	0.80	6.8
	100000	50×80	1.20	7.5
	150000	50×100	1.20	10.2
	220000	63.5×100	1.60	12.8
	330000	63.5×120	1.60	14.0
	470000	63.5×130	2.00	15.4
	560000	75×140	2.50	16.2
	680000	75×150	2.50	17.5
	820000	90×150	2.80	19.0
16 1C	47000	35×60	0.60	5.7
	56000	35×80	0.60	6.1
	68000	50×80	0.80	6.9
	100000	50×100	0.80	9.2
	150000	50×120	1.00	12.0
	220000	63.5×120	1.50	14.1
	330000	63.5×130	1.50	18.4
	470000	75×150	1.80	20.0
	560000	90×150	2.20	21.1
	680000	90×170	2.40	23.8
25 1E	33000	35×60	0.50	5.7
	47000	35×80	0.50	7.6
	56000	50×80	0.60	8.1
	68000	50×100	0.60	9.5
	100000	50×120	0.80	10.8
	150000	63.5×100	0.80	12.1
	220000	63.5×120	0.80	15.8
	330000	75×130	1.20	17.4
	470000	90×150	1.60	21.5
	560000	90×170	1.80	22.2
35 1V	15000	35×60	0.40	4.1
	22000	35×80	0.40	5.2
	33000	50×60	0.50	6.3
	47000	50×80	0.50	7.4
	56000	50×100	0.60	9.0
	68000	50×120	0.60	11.1
	100000	63.5×120	0.70	12.7
	150000	25×40	0.70	14.5

Rated voltage (V)	capacity (μF)	Dimensions D×L (mm)	tgδ (100Hz)	Ripple current (mA,rms)
35 1V	220000	30×30	0.80	15.8
	330000	25×45	1.20	19.2
	470000	30×35	1.50	22.4
	10000	35×80	0.30	4.6
50 1H	15000	50×60	0.30	5.1
	22000	50×80	0.40	6.4
	33000	50×100	0.40	7.5
	47000	50×120	0.50	9.7
	56000	63.5×120	0.50	11.2
	68000	75×120	0.50	12.4
	82000	75×130	0.60	14.5
	100000	75×150	0.60	16.0
	150000	90×140	0.80	18.3
	220000	90×170	0.80	21.1
63 1J	330000	90×220	1.00	23.2
	10000	35×80	0.30	4.2
	15000	50×80	0.35	5.5
	22000	50×100	0.40	6.7
	33000	50×120	0.45	9.1
	47000	63.5×120	0.50	10.2
	68000	75×120	0.60	12.5
	82000	75×130	0.60	14.5
	100000	75×150	0.60	16.8
	150000	90×140	0.80	19.1
100 2A	220000	90×170	0.80	21.7
	330000	90×220	0.80	23.5
	3300	35×80	0.25	3.2
	4700	35×100	0.25	3.8
	6800	50×80	0.25	5.1
	8200	50×100	0.25	5.4
	10000	63.5×100	0.30	6.5
	15000	63.5×120	0.30	7.5
	22000	75×100	0.35	9.6
	33000	75×120	0.35	11.7
	47000	75×150	0.40	14.0
	68000	90×120	0.50	16.2
	82000	90×150	0.50	17.4
	100000	90×170	0.60	19.5

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List of product specifications and technical parameters

Rated voltage (V)	capacity (μF)	Dimensions D×L (mm)	tgδ (100Hz)	Ripple current (mA,rms)
160 2C	1500	35×80	0.20	2.1
	2200	35×100	0.20	2.7
	3300	50×80	0.20	3.8
	4700	50×100	0.20	4.2
	6800	50×120	0.20	5.6
	8200	63.5×100	0.25	6.1
	10000	63.5×120	0.25	7.5
	15000	75×120	0.30	8.9
	22000	75×120	0.30	11.4
	33000	90×150	0.35	12.7
	47000	90×200	0.35	16.3
	68000	90×250	0.40	18.2
200 2D	1500	35×80	0.20	1.8
	2200	50×80	0.20	2.6
	3300	50×100	0.20	3.7
	4700	50×120	0.20	4.8
	6800	63.5×110	0.20	6.3
	8200	63.5×120	0.20	8.0
	10000	75×120	0.25	9.2
	15000	75×130	0.25	10.5
	22000	90×150	0.30	12.7
	33000	90×170	0.30	14.5
	47000	90×220	0.30	17.2
250 2E	1000	35×80	0.20	1.9
	1500	50×80	0.20	2.4
	2200	50×100	0.20	3.2
	3300	50×120	0.20	4.3
	4700	63.5×100	0.20	5.4
	6800	75×120	0.20	7.1
	8200	75×130	0.25	8.4
	10000	75×150	0.25	9.6
	15000	90×150	0.30	12.2
	22000	90×170	0.30	15.5
	33000	90×220	0.30	17.1

Rated voltage (V)	capacity (μF)	Dimensions D×L (mm)	tgδ (100Hz)	Ripple current (mA,rms)
350 2V	680	35×80	0.20	3.2
	1000	50×80	0.20	4.1
	1500	50×100	0.20	5.5
	2200	50×120	0.20	7.2
	3300	63.5×120	0.20	9.4
	4700	63.5×130	0.20	13.8
	6800	75×130	0.25	15.5
	8200	90×140	0.25	18.2
	10000	90×160	0.30	25.1
	15000	90×200	0.30	27.4
	22000	90×220	0.30	31.7
400 2G	470	35×60	0.20	2.7
	680	35×80	0.20	3.2
	1000	50×80	0.20	4.1
	1500	50×100	0.20	6.0
	2200	63.5×100	0.20	7.5
	3300	63.5×120	0.20	9.2
	4700	75×120	0.25	12.8
	6800	75×160	0.25	15.4
	8200	90×150	0.25	18.2
	10000	90×170	0.25	20.2
	15000	90×250	0.25	23.5
450 2W	470	35×80	0.20	2.7
	680	50×80	0.20	3.2
	1000	50×100	0.20	3.8
	1500	50×120	0.20	5.5
	2200	63.5×120	0.20	6.9
	3300	75×120	0.20	9.6
	4700	75×150	0.25	13.4
	6800	90×170	0.25	16.5
	10000	90×220	0.25	22.7

Part number example

CAEAC 478 M 2A A 350800
series capacitance tolerance voltage typeA/B dimension