HITANO
ENTERPRISE CORP. ®

Data Sheet

Customer :

Product : Conductive Polymer Aluminum Solid Electrolytic Capacitor
SMD Type, Long Life, 105℃ 20,000Hours – HME Series

Size : 6.3x6mm ~ 10x12.8mm

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Record of change

Date	Ver.	Description	Page

HITANO ENTERPRISE CORP.

7F-7, No. 3, Wu Chuan 1st Road, New Taipei Industrial Park,
New Taipei City, TAIWAN, R.O.C.
Tel: +886 2 2299 1331 (Rep.)
Fax: +886 2 2298 2466, 2298 2969

Prepared by	Checked by	Approved by	Accepted by (customer)
01-Sep.-2025	01-Sep.-2025	01-Sep.-2025	
Randy Yu	***Michelle Lin***	***Arthur Su***	

HITANO ENTERPRISE CORP. ®

HME SERIES

CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

SMD type, Long Life 20,000 hours

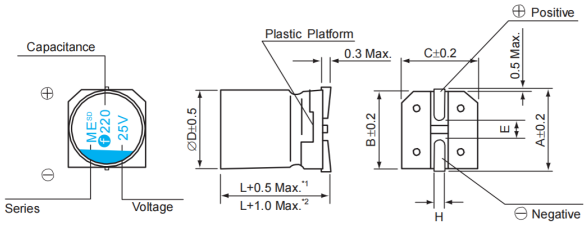
- Low ESR & high ripple current capability
- Endurance: 20,000 hours at 105℃
- Rated Voltage：2.5V ~ 50V
- Rated capacitance：10 ~ 2,700 μF

■SPECIFICATIONS

Item	Performance Characteristics
Operating Temperature range	-55 + 105℃
Rated Voltage Range	2.5V ~ 50V
Capacitance Tolerance	± 20% (at 120 Hz/ 20℃)
Surge Voltage	Rated Voltage x 1.15
Leakage Current	Within the specified value as in standard rating
Dissipation Factor (tan δ)	0.12 or less, less than or equal to the specified value at 20℃ and 120Hz
Temperature Characteristics (Impedance ratio at 100 KHz)	Z (-25℃) / Z (+20℃) ≤ 1.15 Z (-55℃) / Z (+20℃) ≤ 1.25
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 20,000 hours at 105℃. Capacitance change: ≤ ± 20% of the initial value D. F. (Tan δ): ≤ 150% of initial specified value ESR: ≤ 150% of initial specified value Leakage current: Initial specified value or less
Bias Humidity Test	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjecting them at 60℃, 90 to 95% RH for 1,000 hours. Capacitance change: ≤ ± 20% of the initial value D. F. (Tan δ): ≤ 150% of initial specified value ESR: ≤ 150% of initial specified value Leakage current: Initial specified value or less
Surge Voltage Test	The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltage specified At 105℃ for 30 seconds through a protective resistor (R=1KΩ) and discharge for 5 minutes 30 seconds. Capacitance change: ≤ ± 20% of the initial value D. F. (Tan δ): ≤ 150% of initial specified value ESR: ≤ 150% of initial specified value Leakage current: Initial specified value or less
Failure Rate	0.5% per 1,000 hours maximum (Confidence level 60% at 105℃)

※ In case of any doubt arises, measure the leakage current after voltage applied for 120 minutes at 105℃.

■ Dimension



ØD	L	A	B	C	H	E
6.3	6.0	6.6	6.6	7.3	0.5~0.8	2.1
6.3	7.7	6.6	6.6	7.3	0.5~0.8	2.1
8	10.0	8.3	8.3	9	0.8~1.1	3.2
8	12.5	8.3	8.3	9	0.8~1.1	3.2
10	10.5	10.3	10.3	11	0.8~1.1	4.6
10	12.8	10.3	10.3	11	0.8~1.1	4.6

CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

■ Part Numbering (example: 220 µF 16V 6.3x7.7mm)

H M E	2 2 1	M	1 C	C	R	C	0 7 7	B
SERIES	CAPACITANCE	TOL.	W.V.	TYPE	LEAD	DIA.	LENGTH	PRINTING COLOR

■ Standard Products Table

Rated voltage (V.DC)	Rated Capacitance (µF)	Case Size D x L (mm)	tan δ	Leakage Current (µA)	ESR (mΩ max./ 20℃ 100KHz to 300KHz)	Rated ripple current (m rms/105℃,100KHz)
2.5 (0E)	680	6.3 x 7.7	0.12	340	10	3,800
	1000	8 x 10	0.12	500	10	4,300
	1200	8 x 12.5	0.12	600	9	5,400
	1500	10 x 10.5	0.12	750	10	5,500
	2700	10 x 12.8	0.12	1350	9	5,600
4 (0G)	470	6.3 x 7.7	0.12	376	15	3,800
	820	8 x 10	0.12	656	12	4,000
	1000	8 x 12.5	0.12	800	11	4,300
	1500	10 x 10.5	0.12	1,200	10	5,000
	2200	10 x 12.8	0.12	1,760	10	5,300
6.3 (0J)	470	6.3 x 7.7	0.12	592	13	4,000
	680	8 x 10	0.12	857	12	4,500
	820	8 x 12.5	0.12	1,033	11	4,800
	1000	10 x 10.5	0.12	1,260	12	5,000
	1500	10 x 12.8	0.12	1,890	10	5,400
10 (1A)	330	6.3 x 7.7	0.12	660	15	3,400
	470	8 x 10	0.12	940	13	3,800
	680	8 x 12.5	0.12	1,360	14	4,200
	820	10 x 10.5	0.12	1,640	15	4,300
	1000	10 x 12.8	0.12	2,000	13	4,800
16 (1C)	150	6.3 x 6	0.12	480	30	2,400
	220	6.3 x 7.7	0.12	704	15	4,100
	470	8 x 10	0.12	1,504	18	3,500
	560	8 x 12.5	0.12	1,792	17	4,100
	820	10 x 10.5	0.12	2,624	16	4,200
	1000	10 x 12.8	0.12	3,200	12	5,200
25 (1E)	68	6.3 x 6	0.12	340	35	2,200
	100	6.3 x 7.7	0.12	500	26	2,900
	220	8 x 10	0.12	1,100	30	2,500
	330	8 x 12.5	0.12	1,650	20	3,600
	470	10 x 10.5	0.12	2,350	40	2,100
	680	10 x 12.8	0.12	3,400	20	4,300
35 (1V)	47	6.3 x 6	0.12	329	85	800
	68	6.3 x 7.7	0.12	476	60	1,100
	120	8 x 10	0.12	840	25	3,800
	150	8 x 12.5	0.12	1,050	20	4,000
	220	10 x 10.5	0.12	1,540	22	4,100
	330	10 x 12.8	0.12	2,310	18	4,400
50 (1H)	10	6.3 x 6	0.12	100	95	700
	22	6.3 x 7.7	0.12	220	70	1,000
	33	8 x 10	0.12	330	25	3,800
	47	8 x 12.5	0.12	470	24	3,900
	68	10 x 10.5	0.12	680	23	4,000
	100	10 x 12.8	0.12	1,000	20	4,300

■ Frequency coefficient of allowable ripple current

Frequency	120 Hz ≤ f < 1 KHz	1 KHz ≤ f < 10 KHz	10 KHz ≤ f < 100 KHz	100 KHz ≤ f ≤ 300 KHz
Coefficient	0.05	0.30	0.70	1.00