



Polymer Electrolytic Modular Capacitors

M55 Module Polymer Hermetic Seal



Why Choose KEMET

KEMET Electronics Corporation is a leading global supplier of electronic components. We offer our customers the broadest selection of capacitor technologies in the industry, along with an expanding range of electromechanical devices, electromagnetic compatibility solutions and supercapacitors. Our vision is to be the preferred supplier of electronic component solutions for customers demanding the highest standards of quality, delivery and service.

Features & Benefits

- Extremely low and stable ESR (as low as 15 mΩ)
- High frequency capacitance retention
- Low temperature capacitance stability
- High ripple current capability (17,500 mA_{rms})
- Excellent power dissipation capability
- Stackable packaging
- Mechanically robust assembly and epoxy housing
- Operates at up to 80% of rated voltage
- Customized solutions available
- RoHS compliant

Product Checklist

- What is the actual required capacitance?
- What is the operating temperature and frequency?
- What is the ripple current capability needed?
- What is the actual operating voltage?
- Are there any voltage spikes or reverse voltage expected?
- Are there any mechanical robustness concerns, such as vibration or shock?
- What are the ESR requirements?

For more information, samples and engineering kits, please visit us at www.kemet.com or call 1.877.myKEMET.

Programs Supported

For defense and aerospace applications requiring:

- High power
- Filtering
- Hold-up
- Current pulse generation
- High ripple current



Ordering Information

M	550	B	108	M	060	A	A
Capacitor Class	Series	Case Size	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Product Level	Termination Finish
M = Module	550 = Capacitor Series (PHS 105°C) 551 = Capacitor Series (PHS 125°C)	B	First two digits represent significant figures. Third digit specifies number of zeros.	K = ±10% M = ±20%	006 = 6 008 = 8 010 = 10 015 = 15 025 = 25 030 = 30 040 = 40 050 = 50 060 = 60 075 = 75 100 = 100	A = N/A B = DLA 13030 standard reliability T = DLA 13030 high reliability	A = 100% silver (Ag) T = 100% tin (Sn) plated H = Tin/lead (SnPb) solder coated (5% Pb minimum) S = Solder-coated (60% Sn, 40% Pb) G = 100% gold (Au)

Dimensions



Module Frame Size	Dimensions – Millimeters (Inches)						Weight per module (g)
	H	T	W	LL	S	F _{ref}	
1	±0.38 (0.015)	±0.20 (0.008)	±0.38 (0.015)	5.6 (0.22)	12.71 (0.50)	0.81	80



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Frequently Selected Part Numbers

Rated Voltage (V) at 85°C	Rated Capacitance (μF)	KEMET Module Part Number	DC Leakage μA at 25°C Max/5 min	DF% at 25°C 120 Hz Maximum	Maximum ESR mΩ at 25°C 100 kHz	Ripple Current mA _{rms} at 85°C/40 kHz	Maximum Operating Temperature (°C)
6	8,200	M550B828(1)006A(3)	369	5	15	17,500	105
6	8,200	M551B828(1)006A(3)	369	5	15	17,500	125
8	6,800	M550B688(1)008A(3)	408	5	15	17,500	105
8	6,800	M551B688(1)008A(3)	408	5	15	17,500	125
10	5,600	M550B568(1)010A(3)	420	5	15	17,500	105
10	5,600	M551B568(1)010A(3)	420	5	15	17,500	125
15	3,900	M550B398(1)015A(3)	439	5	15	17,500	105
15	3,900	M551B398(1)015A(3)	439	5	15	17,500	125
25	1,000	M550B108(1)025(2)(3)*	188	5	30	12,000	105
25	1,000	M551B108(1)025A(3)	188	5	30	12,000	125
30	680	M550B687(1)030A(3)	153	5	25	14,000	105
30	680	M551B687(1)030A(3)	153	5	25	14,000	125
40	1,000	M550B108(1)040(2)(3)*	300	5	25	13,500	105
40	1,000	M551B108(1)040A(3)	300	5	25	13,500	125
40	1,200	M550B128(1)040(2)(3)*	360	5	20	15,100	105
40	1,200	M551B128(1)040A(3)	360	5	20	15,100	125
50	1,000	M551B108(1)050A(3)	375	5	20	14,500	105
50	1,000	M551B108(1)050A(3)	375	5	20	14,500	125
50	1,200	M550B128(1)050(2)(3)*	450	5	15	17,500	105
50	1,200	M551B128(1)050A(3)	450	5	15	17,500	125
60	1,000	M550B108(1)060(2)(3)*	450	5	25	16,600	105
60	1,000	M551B108(1)060A(3)	450	5	25	16,600	125
75	750	M550B757(1)075(2)(3)*	422	5	20	15,800	105
100	250	M550B257(1)100(2)(3)*	188	5	30	12,750	105

*Screened discrete component DLA qualified

(1) To complete KEMET part number, insert M for ±20% or K for ±10%.

(2) To complete KEMET part number, insert B = standard reliability or T = high reliability.

(3) To complete KEMET part number, insert T = 100% matte tin (Sn) plated, H = Standard solder coated (SnPb 5% Pb minimum), S = 60% tin (Sn) 40% lead (Pb), G = 100% gold (Au), A = 100% silver (Ag).