


















# MAXWELL TECHNOLOGIES ULTRACAPACITORS









Enabling Energy's Future™

Product Name	Rated Capacitance <sup>1</sup> (F)	Rated Voltage (V), 65°/85°C	ESR, DC <sup>1</sup> (mohm)	Leakage Current <sup>4</sup> (mA)	Max. Peak Current <sup>3</sup> (A), 1 Sec., 65°/85°C	Max. Continuous Current <sup>2</sup> (A)		Weight (g)	Stored Energy <sup>7</sup> (Wh)	E <sub>max</sub> <sup>6</sup> (Wh/kg) 65°/85°C	P <sub>max</sub> <sup>5</sup> (W/kg)	Terminal	Length (mm)	Diameter (Width for PC10s) (mm)
						15°C rise	40°C rise							
 PC10-90 <sup>10</sup>	10	2.50	180	0.040	4.5	2.4	3.8	6.3	0.009	1.4	1,400	Straight Lead	29.6 - 35.9	23.6
 PC10HT-90 <sup>10</sup>	10	2.20	180	0.040	3.9	2.4	3.8	6.3	0.007	1.1	1,100	Bent Lead	29.6 - 35.9	23.6
 BCAP0001 P270 T01 <sup>10</sup>	1	2.70/2.30	700	0.006	0.8/0.7	0.4	0.7	1.1	0.001	0.9/0.7	2,400	Leaded	12	8
 BCAP0003 P270 T01 <sup>10</sup>	3.3	2.70/2.30	290	0.012	2.3/1.9	0.8	1.3	1.7	0.003	2.0/1.4	3,100	Leaded	20	10
 BCAP0005 P270 T01 <sup>10</sup>	5	2.70/2.30	170	0.015	3.6/3.1	1.1	1.8	2.3	0.005	2.2/1.6	4,700	Leaded	20	10
 BCAP0010 P270 T01 <sup>10,11</sup> BCAP0010 P270 T11 <sup>10</sup>	10	2.70/2.30	75	0.030	8/7	2.2	3.5	3.5	0.010	2.9/2.1	6,100	Straight Lead	30	10
 BCAP0025 P270 T01 <sup>10</sup> BCAP0025 P270 T11 <sup>10</sup>	25	2.70/2.30	42	0.045	16/14	2.8	4.5	7.5	0.025	3.4/2.4	5,800	Bent Lead	26	16
 BCAP0050 P270 T01 <sup>10</sup>	50	2.70/2.30	20	0.075	34/29	5.4	8.8	13	0.051	3.9/2.8	7,000	Leaded	40	18
 BCAP0100 P270 T01 <sup>10</sup> BCAP0100 P270 T07 <sup>10</sup>	100	2.70/2.30	15	0.260	54/46	6.7	11	23 22	0.101	4.4/3.2 4.6/3.3	5,300 4,900	Leaded Snap In	45	22
 BCAP0150 P270 T07 <sup>10</sup>	150	2.70/2.30	14	0.500	65/56	7.7	13	32	0.152	4.7/3.4	3,700	Snap In	50	25
 BCAP0310 P270 T10 <sup>10</sup>	310	2.70	2.2	0.45	250	25	41	60	0.31	5.2	14,000	Radial Tab	61.5	33.3
 BCAP0350 E270 T11 <sup>10</sup>	350	2.70	3.2	0.30	220	21	34	60	0.35	5.9	9,500	Radial Tab	61.5	33.3
 BCAP0650 P270 K04 <sup>10</sup> BCAP0650 P270 K05 <sup>10</sup>	650	2.70	0.8	1.5	600	54	88	160	0.66	4.1	14,000	Threaded Weldable	51.5	60.4
 BCAP1200 P270 K04 <sup>10</sup> BCAP1200 P270 K05 <sup>10</sup>	1,200	2.70	0.58	2.7	1,000	70	110	260	1.22	4.7	12,000	Threaded Weldable	74	60.4
 BCAP1500 P270 K04 <sup>10</sup> BCAP1500 P270 K05 <sup>10</sup>	1,500	2.70	0.47	3.0	1,200	84	140	280	1.52	5.4	14,000	Threaded Weldable	85	60.4
 BCAP2000 P270 K04 <sup>10</sup> BCAP2000 P270 K05 <sup>10</sup>	2,000	2.70	0.35	4.2	1,600	110	170	360	2.03	5.6	14,000	Threaded Weldable	102	60.4
 BCAP3000 P270 K04 <sup>10</sup> BCAP3000 P270 K05 <sup>10</sup>	3,000	2.70	0.29	5.2	2,200	130	210	510	3.04	6.0	12,000	Threaded Weldable	138	60.4

Images not to scale.

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 BMOD0058 E016 B02 <sup>10</sup>	58	16	22	25	200	12	19	0.63	2.1	3.3	4,600	1EC60068-2-6	Passive	NR	226.5	49.5	76.0
 BMOD0500 P016 B01 <sup>10</sup> BMOD0500 P016 B02 <sup>10</sup>	500	16	2.1	5.2 170	2,000	100	160	5.51	17.8	3.2	5,500	SAE J2380	VMS 2.0 Passive	2,500	418	68	179
 BMOD0083 P048 B01	83	48	10	3	1,100	61	100	10.3	26.6	2.6	5,600	SAE J2380	VMS 2.0	2,500	418	194	126
 BMOD0165 P048 B01 <sup>10</sup>	165	48	6.3	5.2	1,900	77	130	13.5	52.8	3.9	6,800	SAE J2380	VMS 2.0	2,500	418	194	179
 BMOD0130 P056 B03 <sup>10</sup>	130	56	8.1	120	1,800	61	99	18	56.6	3.1	5,400	Telcordia GR-603 Zone 4	Passive	3,500	683	177	175
 BMOD0094 P075 B02	94	75	13	50	1,600	48	78	25	73.4	2.9	4,300	SAE J2380	Passive	2,500	515	263	220
 BMOD0063 P125 B04 BMOD0063 P125 B08	63	125	18	10	1,800	140	240	60.5	136.7	2.3	3,600	ISO16750-3 Table 14	VMS 2.0	4,000	619	425	265
 BMOD0006 E160 B02	5.8	160	220	25	200	7.0	13.0	5.1	20.6	4.0	5,600	IEC60068-2-6	Passive	5,600	367	235	79
 ESM 123000-31	1000	16.2	2	10	N/A	N/A	N/A	9.5	36.5	3.5	3,100	SAE J1455	Intelligent	N/A	330	173	240

## FOOT NOTES

- Capacitance and ESR<sub>DC</sub> measured at 25°C per Document Number 1007239 available at [www.maxwell.com](http://www.maxwell.com).
- Max. continuous current to product 15°C or 40°C temperature increase over ambient.
- Maximum Peak current (1 sec) =  $\frac{1/2 CV}{C \times ESR_{DC} + 1}$
- After 72 hours at 25°C and rated voltage. Initial leakage current can be higher.
- $P_{max} = \frac{V^2}{4 \times ESR_{DC} \times mass}$

$$6. E_{max} = \frac{1/2 CV^2}{3,600 \times mass}$$

$$7. E_{stored} = \frac{1/2 CV^2}{3,600}$$

8. Without fan. With fan, mass is 63.4 kg.

9. Duration = 60 seconds. Not intended as an operating parameter.

10. UL810a Certified

11. Rated voltage 2.50V at 70°C

### VMS: Voltage Management System

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