

Type DSM, Standard Supercapacitor Modules

9V, 18V, and 30V configurations with cable assembly



Type DSM Standard Supercapacitor Modules provide a wide range of capacitance values and voltages to enable simple, rapid implementation into any system. Each module features an insulated construction with integrated cell balancing, cable assembly with a Molex Mini-Lock connector, and 85 °C rated supercapacitor cells.

Highlights

- Standard, stocked modules, great for prototyping.
- Wide operating temperatures compared to Li-batteries
- Voltages up to 30 Vdc, capacitance from 0.15 to 36.6 Farads
- Safe, green alternative to Li-ion batteries
- Each module has voltage balancing
- REACH and RoHS compliant
- UL 810A recognized cells
- Custom designs available

Specifications

Rated Voltage Range	9 Vdc to 30 Vdc
Capacitance Range	0.15 F to 36.6 F
Capacitance Tolerance	-10% +30% (20 °C)
Operating Temperature Range	-40 °C to +65 °C 9V, 18V, 30V
Extended Temperature Range	-40 °C to +85 °C 7.5V, 15V, 25V
Storage Temperature	-40 °C to +70 °C
Life Time	1000 Hours at rated voltage 65 °C
Shelf Life	1000 Hours at 65 °C
Life Cycles	500,000 Cycles at 25 °C, Vr to 1/2 Vr
Regulatory Information	

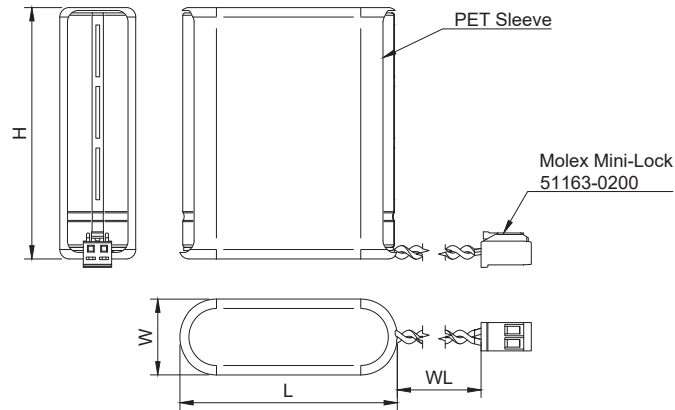
Part Numbering System

DSM	504	Q	009	W	075	PB
Series	Capacitance	Tolerance	Voltage	Terminal Type	Lead Length	Balancing Type
DSM	504 = 0.5 F 105 = 1.0 F 116 = 11 F	Q = -10% to +30%	009 = 9V 018 = 18V 030 = 30V	W = wire with connector	075 = 75mm	PB = passive balancing AB = active balancing

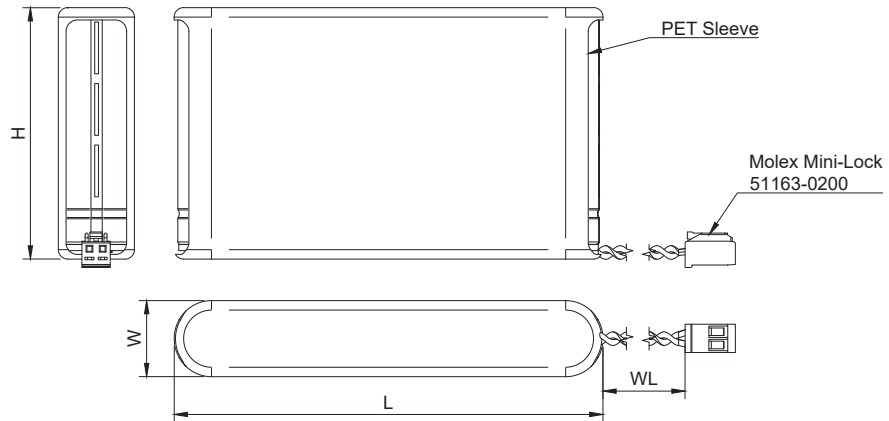
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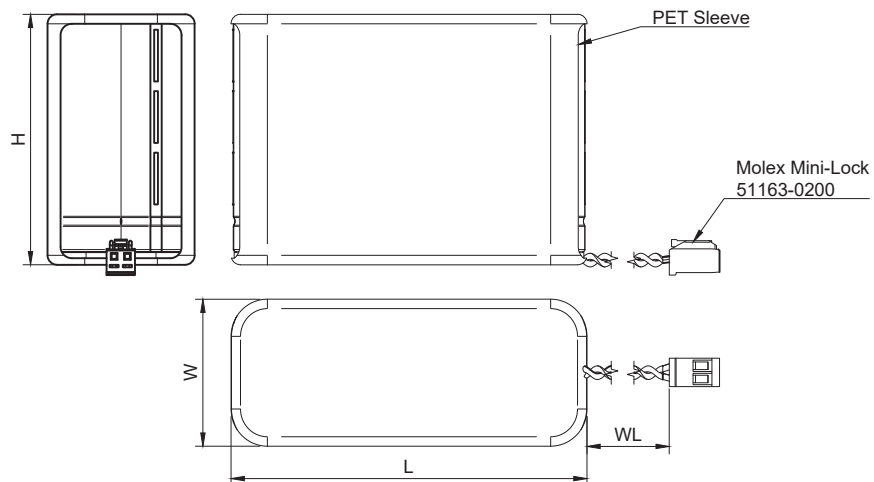
9V Standard Modules



18V Standard Modules



30V Standard Modules



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Part Numbers

Part Number	Nominal Capacitance	ESR DC	Peak Current 1s	Rated Current 5s	Leakage Current 72 hrs	Mass	L (max)	H (max)	W (max)	WL (typ)
	(F)	(mΩ)	(A)	(A)	(mA)	(g)	(mm)	(mm)	(mm)	(mm)
9 VDC (65 °C) 7.5 VDC (85 °C)										
DSM504Q009W075PB	0.5	1940	1.14	0.38	0.20	3.5	21.5	24.5	7.5	75
DSM105Q009W075PB	1.0	455	3.09	0.83	0.30	5.5	27	27	9	75
DSM335Q009W075PB	3.3	546	5.30	2.20	0.90	11	33	30	11	75
DSM505Q009W075PB	5.0	210	12.26	3.86	1.10	13	41	30	14	75
DSM126Q009W075PB	11.6	152	18.89	7.76	3.00	32	51	39	17.5	75
DSM236Q009W075PB	23.3	122	27.29	13.41	9.00	48	57	57	19.5	75
DSM376Q009W075PB	36.6	110	32.84	18.35	11.00	63	57	67	19.5	75
18 VDC (65 °C) 15 VDC (85 °C)										
DSM254Q018W075PB	0.25	3879	1.14	0.38	0.20	6	42	24.5	7.5	75
DSM504Q018W075PB	0.5	909	3.09	0.83	0.30	11	52	27	9	75
DSM165Q018W075PB	1.6	1091	5.24	2.20	0.90	20	64	30	11	75
DSM255Q018W075PB	2.5	334	12.26	3.86	1.10	26	79	30	14	75
DSM585Q018W075PB	5.8	303	18.93	7.76	3.00	64	100	39	17.5	75
DSM126Q018W075PB	11.6	243	27.34	13.41	9.00	96	112	57	19.5	75
DSM186Q018W075PB	18.3	220	32.66	18.08	11.00	126	112	67	19.5	75
30 VDC (65 °C) 25 VDC (85 °C)										
DSM154Q030W075PB	0.15	6464	1.14	0.38	0.20	10	35	24.5	14.5	75
DSM304Q030W075PB	0.3	1515	3.09	0.83	0.30	15	44	27	18	75
DSM105Q030W075PB	1.0	1818	5.32	2.20	0.90	29	54	30	22	75
DSM155Q030W075PB	1.5	700	12.27	3.86	1.10	48	66	30	27	75
DSM355Q030W075PB	3.5	505	18.97	7.76	3.00	89	84	39	34	75
DSM705Q030W075PB	7.0	404	27.43	13.41	9.00	171	94	57	38	75
DSM116Q030W075PB	11.0	360	33.26	18.41	11.00	225	94	67	38	75

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