

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	

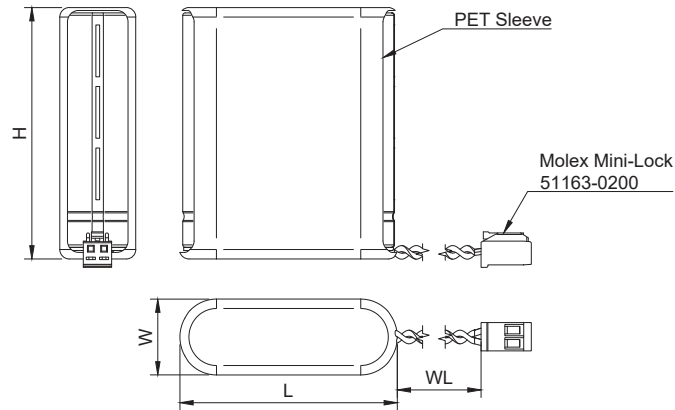
Part Numbering System

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

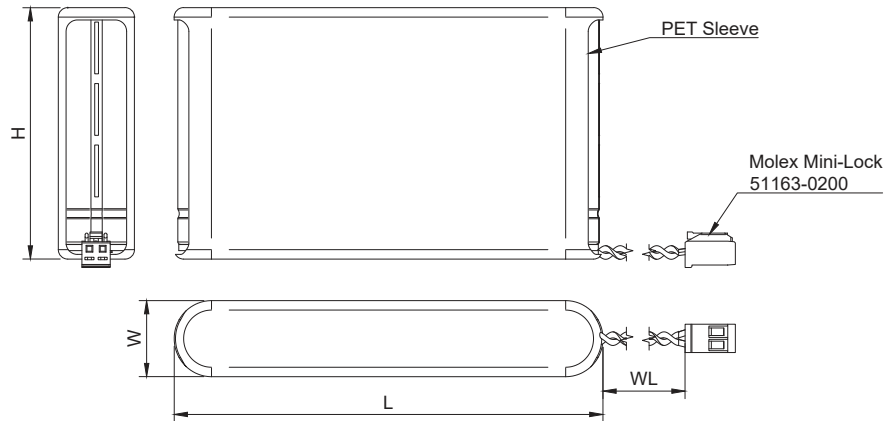
Type DSM, Standard Supercapacitor Modules

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

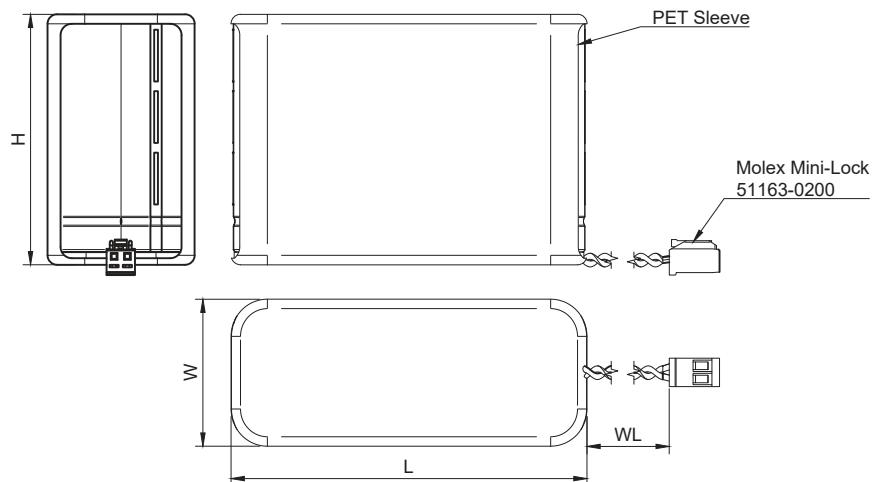
9V Standard Modules



18V Standard Modules



30V Standard Modules



Type DSM, Standard Supercapacitor Modules

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

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

Notice and Disclaimer: All product drawings, descriptions, specifications, statements, information and data (collectively, the "Information") in this datasheet or other publication are subject to change. The customer is responsible for checking, confirming and verifying the extent to which the Information contained in this datasheet or other publication is applicable to an order at the time the order is placed. All Information given herein is believed to be accurate and reliable, but it is presented without any guarantee, warranty, representation or responsibility of any kind, expressed or implied. Statements of suitability for certain applications are based on the knowledge that the Cornell Dubilier company providing such statements ("Cornell Dubilier") has of operating conditions that such Cornell Dubilier company regards as typical for such applications, but are not intended to constitute any guarantee, warranty or representation regarding any such matter – and Cornell Dubilier specifically and expressly disclaims any guarantee, warranty or representation concerning the suitability for a specific customer application, use, storage, transportation, or operating environment. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by Cornell Dubilier with reference to the use of any Cornell Dubilier products is given gratis (unless otherwise specified by Cornell Dubilier), and Cornell Dubilier assumes no obligation or liability for the advice given or results obtained. Although Cornell Dubilier strives to apply the most stringent quality and safety standards regarding the design and manufacturing of its products, in light of the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies or other appropriate protective measures) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage. Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated in such warnings, cautions and notes, or that other safety measures may not be required.