

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 | |

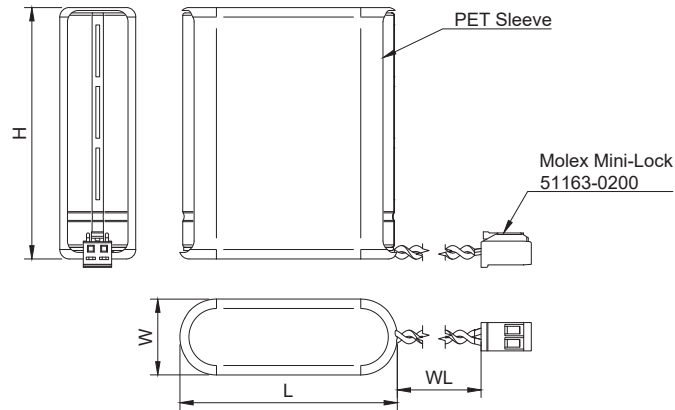
Part Numbering System

| | | | | | | |
|----------------------|--|-----------------------|------------------------------------|---------------------------|---------------------------|---|
| DSM Series | 504 Capacitance | Q Tolerance | 009 Voltage | W Terminal Type | 075 Lead Length | PB 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 |

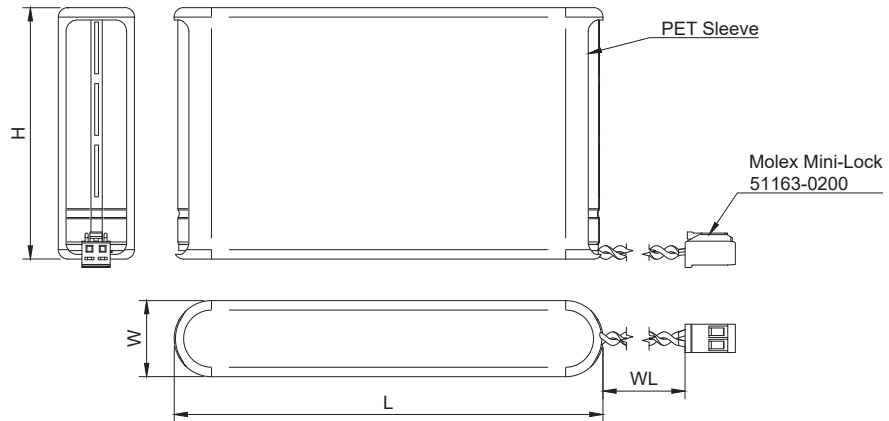
Type DSM, Standard Supercapacitor Modules

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

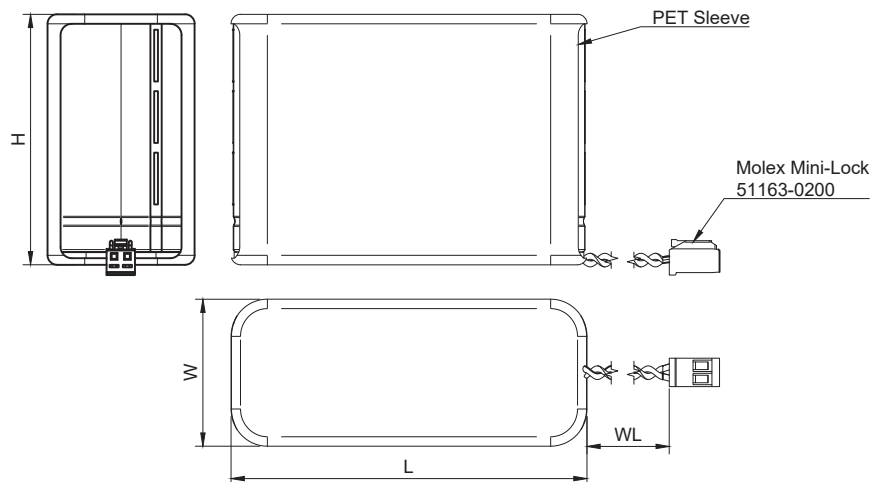
9V Standard Modules



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 |