

Series: BMOD®



> Features:

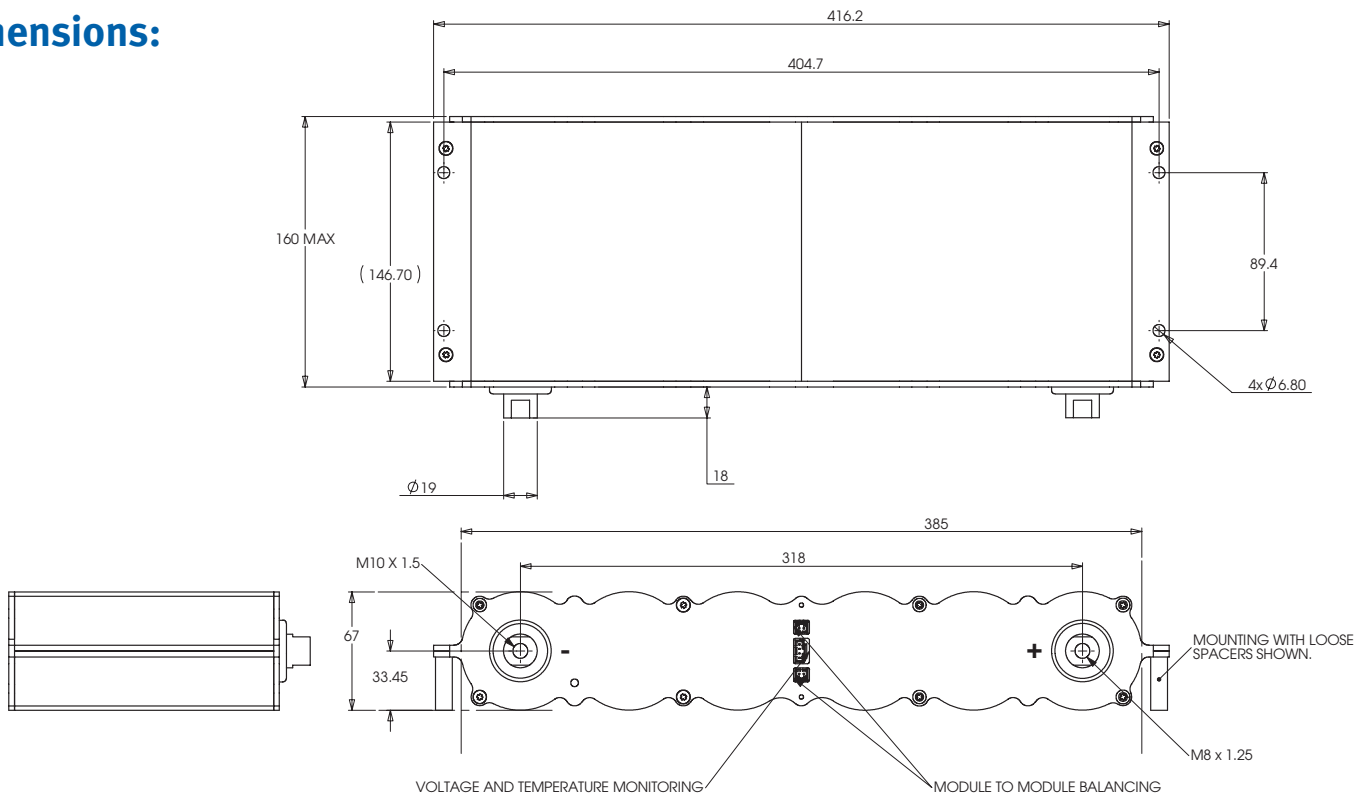
- > 16.2 V operating voltage
- > Compact, rugged, fully enclosed and splashproof system
- > Individually balanced cells
- > Mountable option included
- > Identifiable screw terminals
- > Module-to-module balancing
- > Voltage and temperature sensor output included



> Applications:

- > Automotive subsystems
- > Heavy duty vehicle subsystems
- > Rail system power
- > Power quality
- > Fuel cells

> Dimensions:



Sales Part #	Balancing	Dimensions, mm			Weight [kg]	Vol. [l]	Typical package qty
		L	W	T			
BMOD2600-16	Active	420	178	70	5	4.85	2

Product dimensions and specifications may change without notice. Please contact Maxwell Technologies directly for any technical specifications critical to application.

Specifications:

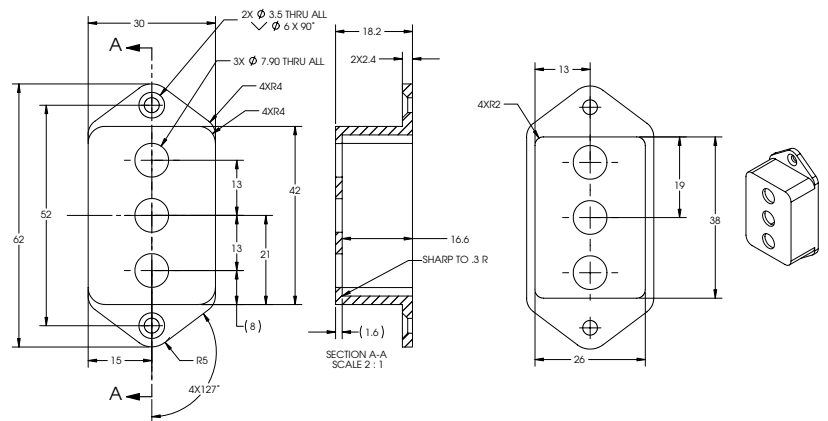
	Product Specification		
	BMOD2600-16	Tolerance	Standard
Interconnects	Threaded Screw Terminals		Pos. M8 x 1.25; Neg. M10 x 1.5, 6H x 15mm deep
Capacitance, C _R [F]	430	+ 20%	
Voltage, U _R	16.2		
Internal resistance, DC [mohm]	3.5	Max.	Discharging at Constant Current (25°C)
Internal resistance, 100 Hz [mohm]	2.5	Max.	
Thermal resistance, R _{th} [°C/W]	0.53		ΔT = D R _{th} I _c ² R _d
Short circuit current, I _{sc} [A]	5000		Caution , current possible with short circuit from U _R
Leakage current [mA]	5	Max.	72 hrs, 25°C
Operating temp. range [°C]	-40 to 65		
Storage temp. range [°C]	-40 to 70		
Endurance, Capacitance [F]	< 20% decrease from initial		1500 hrs @ U _R and 65°C
Endurance, Resistance [mohm]	< 60% increase from initial		
Maximum energy, E _{max} [Whr/kg]	3.1		Full discharge from U _R
Peak Power Density [W/kg]	5,200		Matched load
Power, P _d [W/kg]	1,800		See additional technical information
Life Time	ΔC/C _R < 30%, ESR < 2.5 x increase		from initial spec after 10 years @U _R and 25°C
Cycle Life Time	ΔC/C _R < 20% decrease, ESR < 2x increase		from initial spec after 1M cycles (U _R to 1/2 U _R) @ 25°C (I = 100A)

Markings: Modules are marked with the following information

Rated capacitance, rated voltage, product number, name of manufacturer, positive and negative terminal, warning marking, serial #

Mounting Recommendations:

The module can be secured at 4 locations with provided standoffs.
Standoffs clearance for M6 or .25" screws.
Refer to layout drawing for hole spacing.
Maximum torque for terminal is 10Nm.
Terminal post must be secured across 16mm wrench flats while tightening.
Optimal heat transfer for module cooling is at flat ends of module.



Connections cover

Additional Technical Information:

$$P_d = (0.12 \times E^2 / R_d) / M$$

$$\Delta T = D R_{th} I_c^2 R_d$$

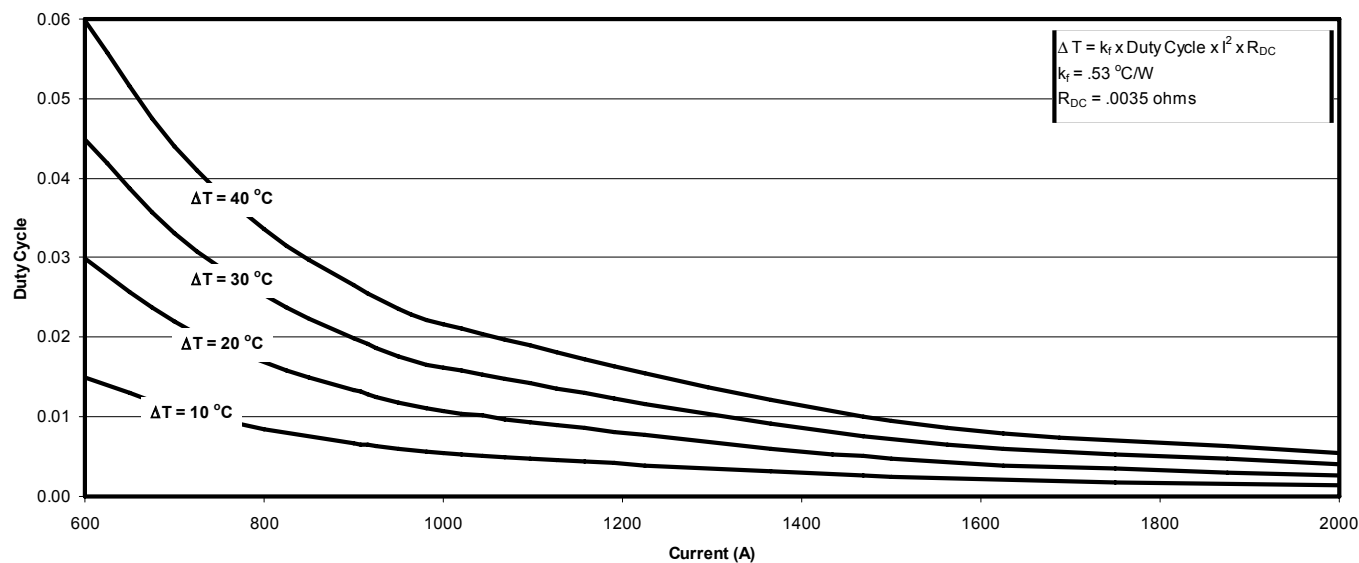
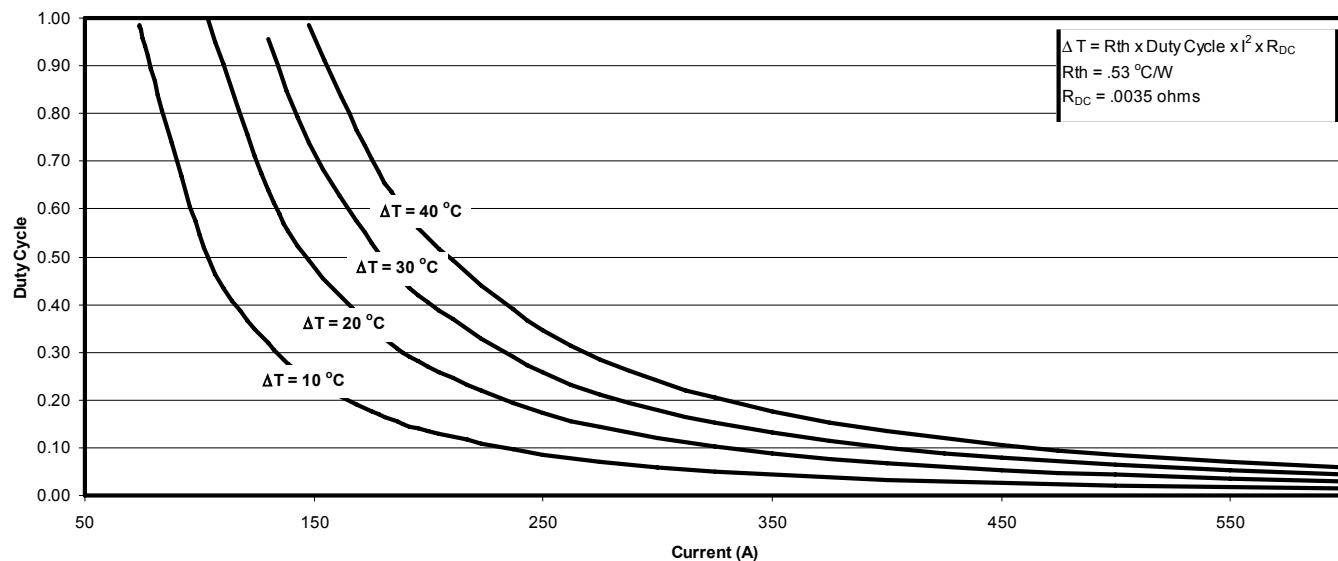
E = charge voltage (U_R)
 R_d = internal resistance (DC)

M = capacitor weight (kg)
 V = capacitor volume (l)

D = duty cycle
 I_c = continuous current

› ΔT - duty cycle vs. operating current:

- › Curves generated under free convection at 25°C ambient



Patent Pending

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