Maxwell TECHNOLOGIES

Lug Connection
Series: BPAK

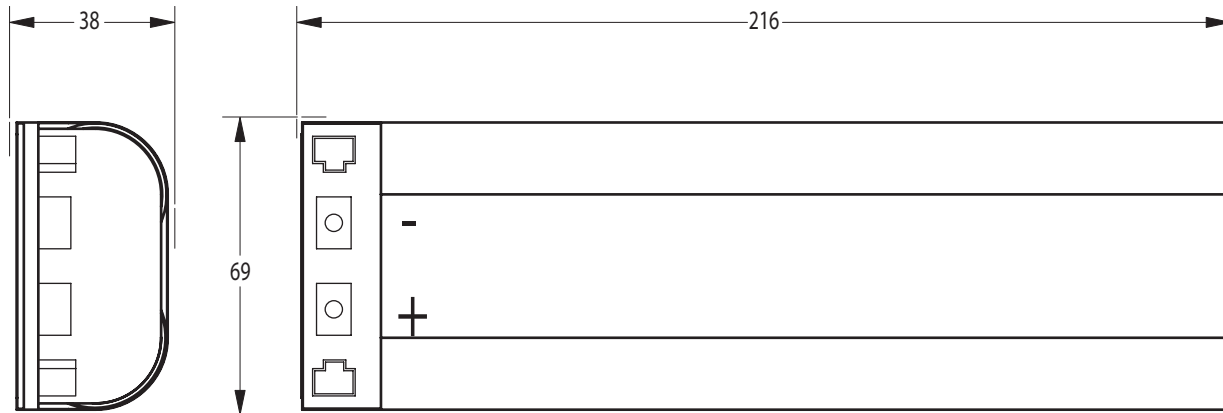**BOOSTCAP® ULTRACAPACITORS**

› ## Features:
- › 15 V working voltage
- › Individually balanced cells
- › Compact, efficient packaging
- › Strap mountable
- › Module-to-module balance cable included

› ## Applications:
- › Automotive subsystems
- › Heavy duty vehicle subsystems
- › Rail system power
- › Windmill pitch control systems
- › Wireless transmissions

› ## Dimensions:

Case size	Part #	Balancing	Dimensions, mm			Weight [g]	Vol. [l]	Typical package qty
			L	W	T			
BPAK0350-15EA	103958	Active	216	69	38	500	0.566	1
BPAK0350-15ER	103957	Passive	216	69	38	500	0.566	1

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

› ## Specifications:

	Product Specification			
	BPAK0350-15EA	BPAK0350-15ER	Tolerance	Standard
Mounting	Shock mount inside enclosure			
Capacitance, C_R [F]	58		+/- 20%	
Voltage, U_R	15			
Internal resistance, DC [ohm]	0.018		+/- 25 %	Discharging at Constant Current (25°C)
Internal resistance, 1 kHz [ohm]	0.009		+/- 25 %	Discharging at Constant Current (25°C)
Rated current, [A]	47			
Leakage current [mA]	0.001	0.05		72 hrs, 25°C
Operating temp. range [C]	-40 to 65			
Storage temp. range [C]	-40 to 70			
Endurance, Capacitance [F]	< 20% decrease			
Endurance, Resistance [ohm]	< 25% increase			1000 hrs @ U_R and 65°C
Power, P_d [W/kg]	3,000			
Power, P_v [W/l]	2,650			See additional technical information
Life Time	$\triangle$C < 20% decrease, ESR < 200% increase			from initial value after 10y @ 25°C
Cycle Life	$\triangle$C < 20% decrease, ESR < 200% increase			from initial value after 500K cycles @ 25°C (I = 5A)

› ## Markings: Packs are marked with the following information

Rated capacitance, rated voltage, product number, name of manufacturer, positive and negative terminal

› ## Mounting Recommendations:

Units may be mounted and operated in any orientation. The pack should be shock mounted within a protective enclosure. Care should be taken to prevent motion between the pack and the enclosure. This motion can wear through the shrink-wrap covering over time and expose electrically conductive surfaces.

› ## Additional Technical Information:

$P_d = (0.12 \times E^2/R_d)/M$ where E = charge voltage (U_R), R_d = internal resistance (DC)

           M = capacitor weight (kg)

$P_v = (0.12 \times E^2/R_d)/V$ where V = capacitor volume (l)

US Patent: 6,806,686 and additional Patents Pending