

**BPAK0052 P015 B01**  
**BPAK0052 P015 B02**  
**BPAK0058 E015 B01**  
**BPAK0058 E015 B02**



**FEATURES AND BENEFITS**

- 15 V working voltage
- Individually balanced cells
- Rugged, fully enclosed system
- Screw terminals
- Module-to-module balance cable included
- UL Recognized

**APPLICATIONS**

- Automotive subsystems
- Consumer electronics
- Portable power tools
- Renewable energy systems
- Short term UPS and telecom

**PRODUCT SPECIFICATIONS**

CAPACITANCE	BPAK0052 B01	BPAK0052 B02	BPAK0058 B01	BPAK0058 B02
Nominal capacitance	52 F	52 F	58 F	58 F
Tolerance capacitance	±20%			
<b>VOLTAGE</b>				
Rated voltage	15 V			
Surge voltage	15 V			
Maximum operating voltage	50 V			
Isolation voltage	1,100 V			
<b>RESISTANCE</b>				
ESR, DC	0.8 mΩ	0.58 mΩ	19 mΩ	19 mΩ
Resistance tolerance	±25%			
Thermal resistance (Rth)	6.5°C/W	5.3°C/W	1.8°C/W	1.8°C/W
<b>TEMPERATURE</b>				
Operating temperature range	-40°C to +65°C			
Storage temperature range	-40°C to +70°C			
Temperature characteristics				
Capacitance change	Within ±5% of initial measured value at 25°C (at -40°C)			
Internal resistance change	Within 150% of initial measured value at 25°C (at -40°C)			
<b>POWER</b>				
Pd			3,000 W/kg	3,000 W/kg
Pmax			11,200 W/kg	11,200 W/kg
<b>ENERGY</b>				
Emax			3.63 Wh/kg	3.63 Wh/kg
<b>LIFESPAN</b>				
Endurance After 1,000 hours application of rated voltage at 65°C.				
Capacitance change	Within 20% of initial specified value			
Internal resistance change	Within 25% of initial specified value			
Life test After 10 years at rated voltage and 25°C.				
Capacitance change	Within 20% of initial specified value			
Internal resistance	Within 100% of initial specified value			

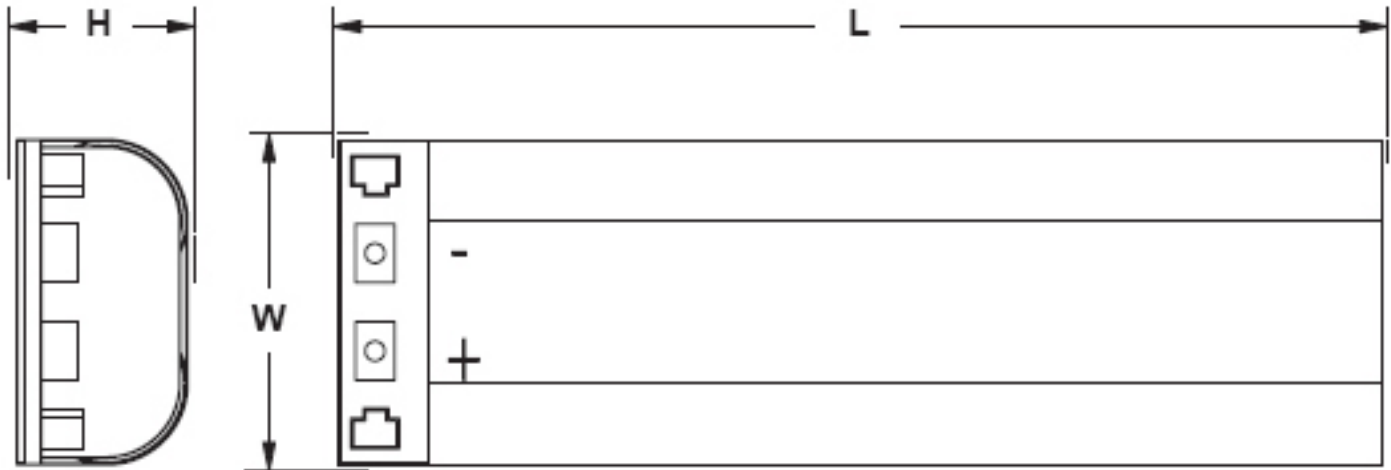
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**PRODUCT SPECIFICATIONS (cont.)**

CYCLES	BPAK0052 B01	BPAK0052 B02	BPAK0058 B01	BPAK0058 B02
Capacitors cycled between specified voltage and half rated voltage under constant current at 25 °C (500,000 cycles).				
Capacitance change	Within 20% of initial specified value			
Internal resistance	Within 100% of initial specified value			
<b>CURRENT</b>				
Leakage current After 72 hours at 25°C. Initial leakage current can be higher.	1 mA	55 mA	1 mA	55 mA
Short circuit current (Isc) <b>CAUTION:</b> Current possible with short circuit from UR. Do not use as an operating current	1,500 A	1,500 A	1,500 A	1,500 A
Maximum continuous current	20 A	20 A	20 A	20 A
Maximum peak current, 1 sec	80 A	80 A	80 A	80 A
<b>CONNECTION</b>				
Terminal	Screw			
<b>MONITORING (IN-BUILT)</b>				
Balancing	Active	Passive	Active	Passive
Thermal monitoring	N/A			
<b>SIZE</b>				
Dimensions	See drawing.			
Mass	500g	500g	560g	560g
Volume	0.566 L	0.566 L	0.566 L	0.566 L
<b>RATINGS</b>				
Vibration resistance	IEC 61373			

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**DIMENSIONS (mm)**

Part number	L	W	H
BPAK0052 P015 B01	216	69	38
BPAK0052 P015 B02	216	69	38
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Product dimensions are for reference only unless otherwise identified. Product dimensions and specifications may change without notice. Please contact Maxwell Technologies directly for any technical specifications critical to application.

**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. **Do not reverse polarize module.**

**MARKINGS**

Modules are marked with the following information: Rated capacitance, rated voltage, product number, name of manufacturer, positive and negative terminal, warning marking, serial number.

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