

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%			
VOLTAGE				
Rated voltage	15 V			
Surge voltage	15 V			
Maximum operating voltage	50 V			
Isolation voltage	1,100 V			
RESISTANCE				
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
TEMPERATURE				
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)			
POWER				
Pd			3,000 W/kg	3,000 W/kg
Pmax			11,200 W/kg	11,200 W/kg
ENERGY				
Emax			3.63 Wh/kg	3.63 Wh/kg
LIFESPAN				
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			

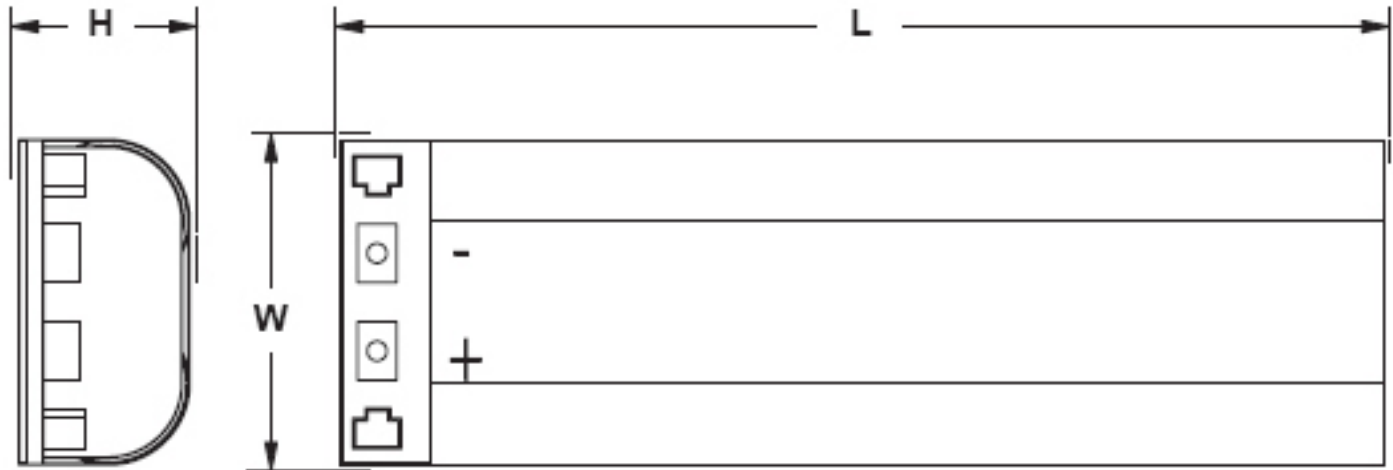
BPAK0052 P015 B01
BPAK0052 P015 B02
BPAK0058 E015 B01
BPAK0058 E015 B02



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			
CURRENT				
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) CAUTION: 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
CONNECTION				
Terminal	Screw			
MONITORING (IN-BUILT)				
Balancing	Active	Passive	Active	Passive
Thermal monitoring	N/A			
SIZE				
Dimensions	See drawing.			
Mass	500g	500g	560g	560g
Volume	0.566 L	0.566 L	0.566 L	0.566 L
RATINGS				
Vibration resistance	IEC 61373			

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



DIMENSIONS (mm)

Part number	L	W	H
BPAK0052 P015 B01	216	69	38
BPAK0052 P015 B02	216	69	38
BPAK0058 E015 B01	216	69	38
BPAK0058 E015 B02	216	69	38

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.

Maxwell Technologies, Inc.
Worldwide Headquarters
 9244 Balboa Avenue
 San Diego, CA 92123
 USA
 Tel: +1 858 503 3300
 US Free Call: +1 877 511 4324
 Fax: +1 858 503 3301

Maxwell Technologies SA
 CH-1728 Rossens
 Switzerland
 Tel: +41 (0)26 411 85 00
 Fax: +41 (0)26 411 85 05

Maxwell Technologies, GmbH
 Brucker Strasse 21
 D-82205 Gilching
 Germany
 T: +49 (0)8105 24 16 10
 F: +49 (0)8105 24 16 19

Maxwell Technologies, Inc.
Shanghai Representative Office
 Rm.2104, Suncome Liauw's Plaza
 738 Shang Cheng Road, Pudong New Area
 Shanghai 200120, P.R. China
 Tel: +86 21 5836 5733
 Fax: +86 21 5836 5620

Online: www.maxwell.com • Email: info@maxwell.com