**Design, Performance and Safety of PolyStor's Lithium-Ion Polymer Gel Batteries**

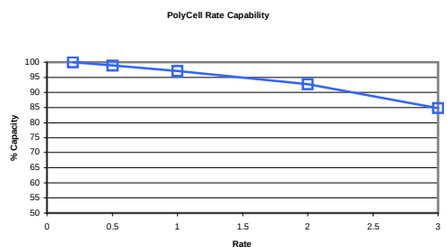
Fabrice Coustier, Gowri Nagarajan, Dave Fouchard
PolyStor Corporation
230 S Vasco Road
Livermore, CA 94550

PolyStor Corporation with an exclusive license from Motorola Energy System Group uses a unique technology to manufacture its PolyCell™ (Lithium-Ion Polymer Gel LIPG battery). Pending patents reinforce current technology and processes enabling manufacture of LIPG batteries on modern high speed manufacturing equipment and also make possible unique ergonomic curved designs.

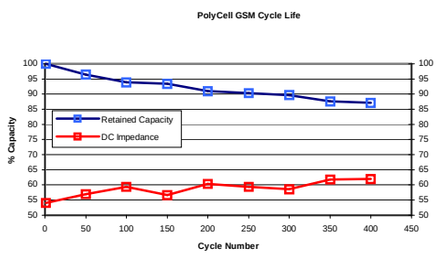
Designers of modern electronic devices generally prefer smaller sizes and more ergonomic designs. These often require specially shaped components. While conventional cylindrical and prismatic cells provide suitable energy and power requirements for many applications, they are not well suited to address the divergent structural requirements of many modern electronic devices. PolyStor's unique technology allows the shaping of Polycell™ batteries to a wide range of radii of curvature and offers the highest energy densities on the market: 160Wh/Kg and 310Wh/l.

With manufacturing processes very similar to its liquid electrolyte lithium-ion systems, PolyStor is the only U.S. manufacturer of both Li-ion and LIPG batteries. The performance of such batteries is described as well as Safety.

The PolyCell™ design allows the batteries to deliver high capacity at high rates. Typically, capacities available at 3C, 2C and 1C are 80%, 90% and 95% respectively, making even very small batteries suitable for GSM or PDMA high pulse current applications.




The PolyCell™ design also produces very high cycle life, with very little increase in impedance over the life of a cell.
Figure 2 shows the remaining capacity during cycling as well as the DC impedance obtained during GSM pulses.




PolyCell™ is a very safe LIPG battery that meets most UL requirements and summary of results will be shown during the meeting. PolyStor is the only U.S. company manufacturing LIPG batteries; excellent performance and safety are presented along with unique patented design.