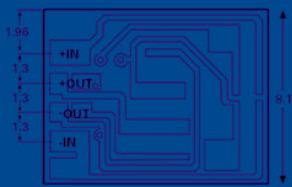
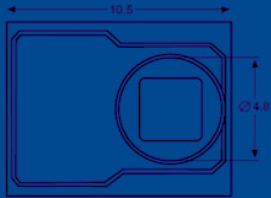




BP SERIES BLOOD PRESSURE SENSOR CASE STUDY



BP Series Blood Pressure Sensor



BACKGROUND

Every time your heart beats, it pumps blood into your arteries. Blood pressure, then, is the force of your blood pushing against the artery walls. It's a critical vital sign in surgery and other critical care situations. A pressure sensor is a key component of every blood pressure monitoring system. Given the critical information these sensors are relaying, accuracy and reliability are of the utmost importance.

CHALLENGE

A medical device company approached Merit Sensor Systems to develop a pressure sensor for critical care blood pressure monitoring that not only met the need for reliability and accuracy, but was also designed to withstand the daily rigors of the health care industry.

SOLUTION

Merit Sensor is unique to the sensor industry because it is a wholly owned subsidiary of Merit Medical Systems, Inc., a leading designer, developer and manufacturer of medical devices. Merit Sensor leveraged its relationship with its parent company to understand how blood pressure systems are used in surgical and patient monitoring settings. This included meeting with Merit Medical employees who had real, clinical-use experience in patient monitoring to get a feel for how these systems are used on a daily basis. The Merit Sensor team was also able to draw on the expertise of Merit Medical's engineers for insights on how the medical industry manufactures and tests pressure-monitoring systems. This allowed Merit Sensor to design, manufacture and test a sensor that not only meets industry requirements for accuracy and reliability, but also lives up to everyday use demands and correlates strongly with customer test procedures.

RESULTS

Collaborating with the Merit Medical team gave Merit Sensor an enhanced understanding of the customer's needs and the product's applications. Armed with that knowledge, Sensor's engineers created a highly accurate and reliable blood pressure sensor – as well as a system that matched the customer's immediate and long-term performance requirements and could stand up to the daily rigor of clinical use. The final product – the BP Series Blood Pressure Sensor – is RoHS-compliant, conforms to the AAMI BP22 specification and has an outstanding burst pressure typical of +800 psi.

ABOUT US

Located just South of Salt Lake City, Merit Sensor Systems, Inc., partners with customers to design, manufacture and market high-performing pressure sensor solutions for automotive, medical, consumer, aviation, defense and industrial applications. We offer full-service design capabilities, in-house wafer fabrication, packaging and assembly as well as expansive pressure ranges. Merit Sensor is a wholly owned subsidiary of Merit Medical Systems, Inc.