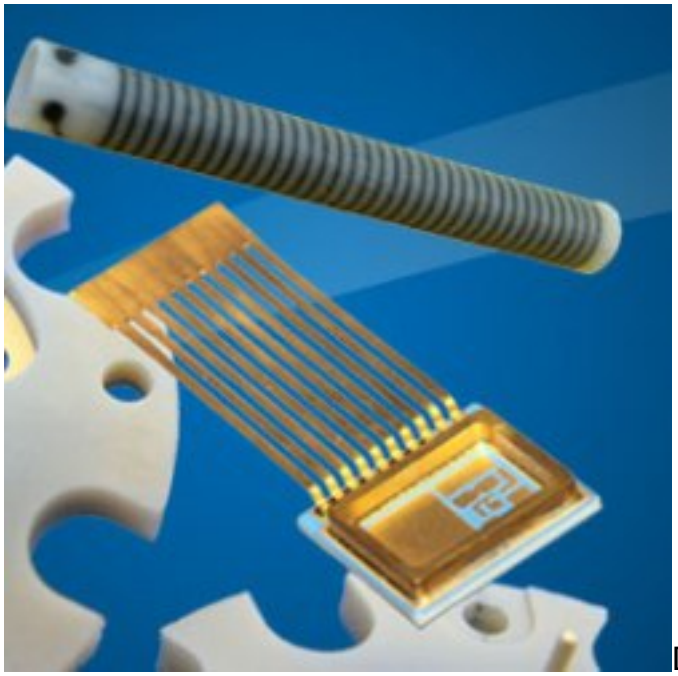
Advanced Ceramic Heater Technology



Durex Industries, a leading North American designer and manufacturer of heaters, temperature sensors, controls and systems, recently announced the release of its new Advanced Ceramic Heater technology.
Durex Industries' ceramic heater technology is available in either Aluminum Nitride (AlN) or Alumina (Al2O3). Ceramic heater technologies offer significant advantages over metal based sheath heaters that have limitations in thermal performance or material compatibility. Durex's ceramic heaters can operate in atmospheric and vacuum environments up to 1652°F (900°C). With its excellent thermal efficiency, AlN heaters can be designed with a multi-layer construction that can deliver up to 2000 W/in2. With chemical resistance to most acidic and alkaline solutions, these compact robust heaters are an ideal solution for demanding thermal applications. Ceramic heaters can be custom designed to optimize thermal performance for the instrumentation or equipment's applications.

Advanced Ceramic Heaters can be designed in multi-layered 2-dimensional or 3-dimensional shapes offering additional performance advantages in applications, such as gas chromatographs and mass spectrometers, semiconductor die bonding, medical devices and other precision equipment. Precision manufacturing processes and machining capabilities allow for unique 3-dimensional designs such as the cylindrical heaters. Cylindrical heater can be designed for process temperatures in excess of 1112°F (600°C) with watt densities up to 1000 W/in2. With design flexibility to distribute wattage and vary the length, inside and outside diameter, this heater can be customized to optimize performance in the application.

Durex Industries
847-639-5600; www.durexindustries.com [1]

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