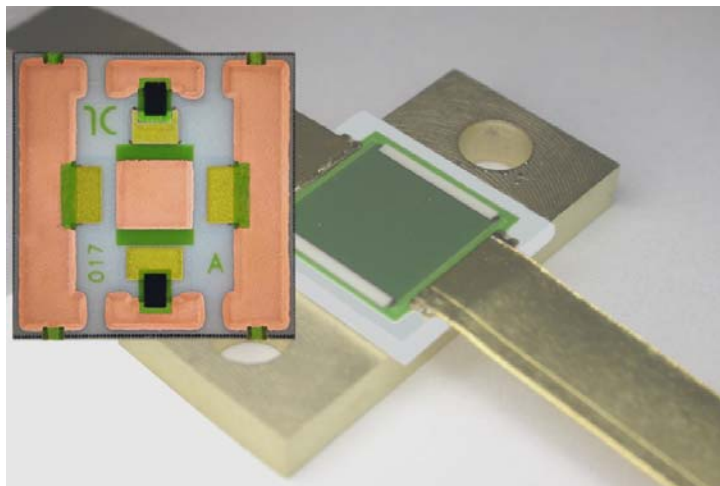


## FOR IMMEDIATE RELEASE

### **Remtec Adds New Product Line of Metalized Ceramic Substrates, Chip Carriers And Packages with PCTF Copper Metalization on Aluminum Nitride.**

Norwood, MA. October 25, 2004. Remtec, Inc., the leading manufacturer of Plated Copper On Thick Film (PCTF<sup>®</sup>) ceramic packaging, has expanded its proprietary PCTF process to include aluminum nitride substrates. New commercially available thick copper metalization system on AlN provides a viable, environmentally advantageous choice to BeO ceramics. In addition, PCTF may serve now as a cost-effective alternative to both thin films and direct bond copper metalization on AlN.

The new PCTF system allows circuit designers to utilize the benefits of AlN substrates in electronic applications requiring high thermal conductivity and high power dissipation. The low thermal expansion and improved physical properties of aluminum nitride with PCTF metalization also ensure a better compatibility of substrate and semiconductor devices. This significantly reduces thermal and mechanical stresses and greatly increases a reliability level. PCTF packages and substrates by Remtec make AlN material a user-friendly option for electronic packaging, while providing thermally comparable performance to beryllia substrates.



AlN substrates and packages with PCTF metalization by Remtec are ideally suited for thermally demanding electronic applications, which require low thermal resistance in a greatly reduced volume. They are typically used to economically dissipate heat generated by high power semiconductor devices, including power amplifiers, power transistor modules, RF/microwave components, power chip resistors and flanged power resistors as well as optoelectronic modules, LED circuitry and other high power microelectronic packages.

The addition of Remtec's PCTF aluminum nitride substrates to the standard features of PCTF metalization – thick and thin film conductors, multilayers, integrated resistors, capacitors, inductors, and .004" thick copper tracks– permits circuit designers to take on the challenges of miniaturization, increased power density and high performance.

Remtec provides microelectronic packaging solutions for power electronics, telecommunication industry including wireless, broadband, cable TV and satellite communication as well as high reliability electronics, sensors, power supplies, dc/dc converters, bio-medical instrumentation and other electronics applications.