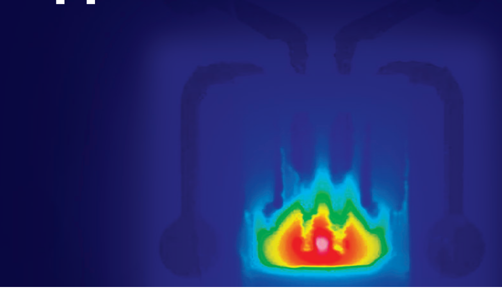
C-Component

Thermal Management and Ceramic Packaging Solutions for Optimal Performance in Your Challenging Applications



www.c-component.com

THE COMPANY

C-Component offers a comprehensive range of cost-effective custom and semi-custom products and services, including advanced ceramic components, various metallization techniques, and packaging solutions.

With a strong legacy of quality engineering, we collaborate closely with our customers to develop and produce sophisticated products for automotive, semiconductor, microwave, aerospace, and defense applications.

Our advanced manufacturing facilities, coupled with extensive expertise and scientific potential, enable us to deliver highly competitive products, from experimental batches to high-volume production for conveyor supply.

TECHNOLOGICAL EXPERTISE

Advanced Ceramic Processing

- Wide Range of Materials: 96% and 99.6% Al_2O_3, AlN, Si_3N_4, ferrite, etc.
- Precision Laser Processing: machining, drilling, cutting, scribing, ablation, marking
- Diamond Dicing and Profiling
- Lapping and Polishing

Custom Glass and Special Material Development

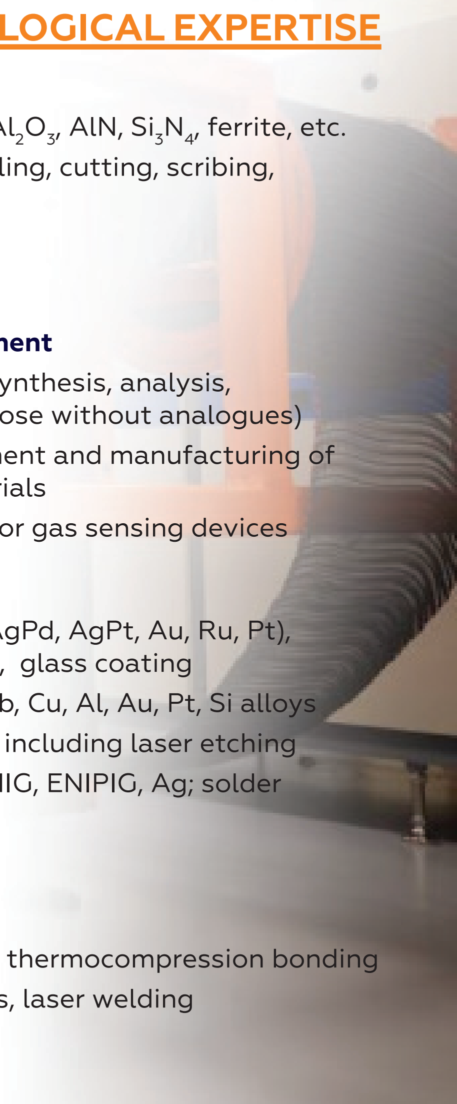
- Technical Glasses and Thick-Film Pastes: synthesis, analysis, development, manufacturing (including those without analogues)
- Thermally Conductive Materials: development and manufacturing of high-performance thermal interface materials
- Development of unique MEMS structures for gas sensing devices

Metallization

- Thick Film Metallization: conductors (Ag, AgPd, AgPt, Au, Ru, Pt), resistors and thermistors (Ru, RuPdAg, Pt), glass coating
- Thin Film Metallization: Cr, V, Ti, NiCr, Ni, Nb, Cu, Al, Au, Pt, Si alloys
- Direct Bonded Copper: special processing, including laser etching
- Electro- and Electroless Plating: Ni, Au, ENIG, ENIPIG, Ag; solder masking

Hybrid Assembly

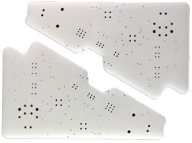
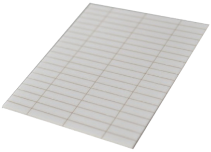
- Die Attach: epoxy, solder
- Wire Bonding: Al, Au, Pt wire; ultrasonic or thermocompression bonding
- Sealing/Encapsulation: epoxy, solder, glass, laser welding



CORE PRODUCTS

Ceramic Components

- Ceramic Thermal Interfaces
- Custom Ceramic Substrates and Components

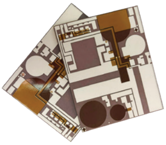



Thermal Interface Materials

- Thermal pads (silicon, silicon-free, carbon fiber)
- Thermal gels, greases, adhesives

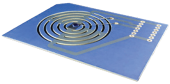

Ceramic Microcircuits & Heatsinks

- Thin Film & Thick Film Microcircuits
- RF/Microwave Microcircuits
- Laser/Photodiode Submounts
- Power LED substrates



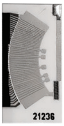

Flat Ceramic Heaters

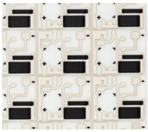
- Thick Film Microheaters
- Special Heating Elements



Automotive Components

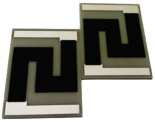
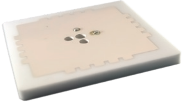
- Ceramic Sensors & Resistive Elements
- Ceramic PCB's



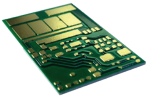
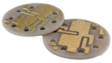
Special Antennas, Resistors, Resonators

- Ceramic Antennas and Resonators
- Custom Power Resistors, RF Termination Resistors

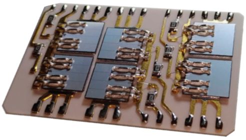
DBC & AMB Substrates

- Custom manufacturing available to meet special requirements that mass producers can not satisfy


Hybrid Assemblies

- Custom Hybrid Micromodules
- Special Power Assemblies



Technical Glasses and Thick-Film Pastes

- Glasses $PbO-V_2O_5-P_2O_5$; $Bi_2O_3-SiO_2-ZnO$; $SiO_2-CaO-Al_2O_3$; etc. Glasses of tungsten, titanium, and platinum group compositions.
- Special protective, dielectric, conductor and resistor thick-film pastes

Our team will ensure prompt responses, provide detailed technical consultation, and offer the most suitable and cost-effective manufacturing options.

WE ARE HERE TO ASSIST

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