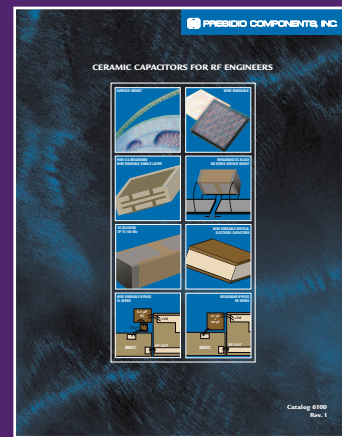
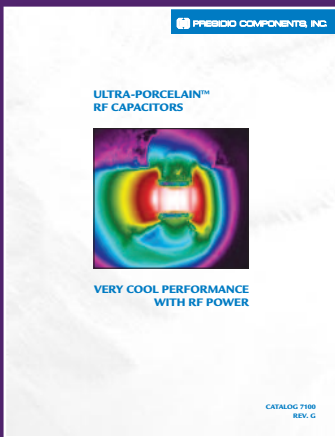


# ENGINEERING SELECTION GUIDE



# PRESIDIO COMPONENTS, INC.

## HIGH PERFORMANCE-HIGH RELIABILITY CERAMIC CAPACITORS

### ABOUT PRESIDIO

Presidio Components has been an industry leader in the design and manufacture of ceramic capacitors since 1980. We are dedicated to excellence in manufacturing, process control and customer service. All products are manufactured and tested in our state-of-the-art, 75,000 square foot facility in San Diego, California, allowing for immediate response to your business needs. We have numerous patents, and hundreds of years of combined engineering experience. We can formulate the right product for your application.



For more information about Presidio's products visit our website: [www.presidiocomponents.com](http://www.presidiocomponents.com)

### TESTING & RELIABILITY

Presidio Components was initially qualified to Mil-PRF-55681 in 1984. Since then we have upgraded our processing line to obtain the highest established reliability of 'S' level. We are also qualified on two additional space level applications, Mil-PRF-123 and Mil-PRF-49470 'T' level. Presidio Components is also proud to be the first QPL supplier to Mil-PRF-49467, the high voltage ceramic capacitor specification. All QPL testing per Mil-STD-202 is done on site at our DSCC approved test lab. For a list of environmental test capabilities, consult the factory.

### CUSTOMER SERVICE

At Presidio Components we work hard to build positive, long-term relationships with our customers and we will go the extra distance to ensure customer satisfaction. If you cannot find a part anywhere else, call Presidio Components. With more than 100 million parts in inventory, we have many commercial and military parts in stock. Our patented ceramic capacitors are typically used in low noise, filter, tuning, broadband DC blocking, and RF bypass applications.

Presidio Components, Inc.  
San Diego, California



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# APPLICATIONS

## DC to 30 MHz

**APPLICATIONS:** HF Amplifiers, Power Supplies, Broadcast Systems in the AM Band, and Downhole Equipment.

**Presidio Product Catalogs for these Applications:** Catalog 5001, 1001, 3001, and 3500

Visit [www.PresidioComponents.com/engineering-guide](http://www.PresidioComponents.com/engineering-guide) for a PDF of this document with links to catalogs.

### CERAMIC CHIP CAPACITORS – Catalog 5001



**Brief Description:** Standard and custom ceramic capacitors with standard EIA case sizes. Custom products include nonstandard case sizes, voltages, including high voltage, high temperature, high “Q,” custom leads.

**Customer Products:** Aircraft avionics, missile guidance systems, switch mode power supplies, phased array radar, transponders and receivers.

<http://presidiocomponents.com/catalog/GeneralBro-CeramicChipsRevG-Dec2015.pdf>

### SMPS STACKED CAPACITORS – Catalog 1001



**Brief Description:** Standard and custom stack capacitors with custom leads, encapsulated stack capacitors, custom assemblies, high temperature downhole assemblies, high power stacks.

**Customer Products:** Aircraft avionics, missile guidance systems, switch mode power supplies, downhole equipment.

<http://presidiocomponents.com/catalog/SMPS-StackedCapsBroRevF-Nov2016.pdf>

### HIGH VOLTAGE – RADIAL LEADED – MIL-PRF-49467 – Catalog 3001

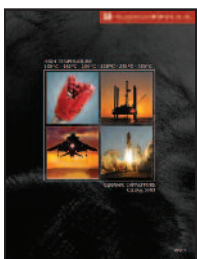


**Brief Description:** MIL-PRF-49467 products, Epoxy coated or uncoated, high voltage discs, high power/high frequency ceramics, temperature compensating ceramics.

**Customer Products:** Oil exploration, missile guidance systems, any product that requires operating temperatures from 150°C to as much as 300°C.

<http://presidiocomponents.com/catalog/HighVoltRadialLeadedMarch2018.pdf>

### HIGH TEMPERATURE CERAMIC CAPACITORS – Catalog 3500



**Brief Description:** High temperature ceramic capacitors, high voltage/high temperature chips, stacks and radial leaded capacitors

**Customer Products:** Oil exploration, missile guidance systems, any product that requires operating temperatures from 150°C to as much as 300°C.

<http://presidiocomponents.com/catalog/HighTempCeramicCapsRevN-Oct2017.pdf>

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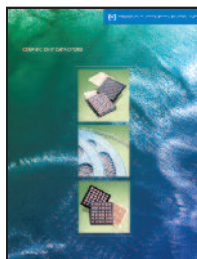
# APPLICATIONS

## 30 MHz to 2.5 GHz

**APPLICATIONS:** Power Amplifiers, Power Supplies, Broadcast Systems in the FM Band, Medical Equipment, Aircraft Avionics, Marine Radio and Navigation, Public Safety Radio and Base Stations, Military Radios, Cellular Base Stations, Transmit and Receive Equipment, Plasma Generators (Semiconductor Equipment) Lump Element Filters, and Oscillators.

**Presidio Product Catalogs for these Applications:** Catalog 5001, 1001, 3001, and 7100

### CERAMIC CHIP CAPACITORS – Catalog 5001

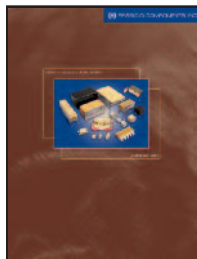


**Brief Description:** Standard and custom ceramic capacitors with standard EIA case sizes. Custom products include nonstandard case sizes, voltages, including high voltage, high temperature, high “Q,” custom leads.

**Customer Products:** Aircraft avionics, missile guidance systems, switch mode power supplies, phased array radar, transponders and receivers, all public and military radios.

<http://presidiocomponents.com/catalog/GeneralBro-CeramicChipsRevG-Dec2015.pdf>

### SMPS STACKED CAPACITORS – Catalog 1001

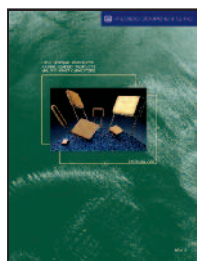


**Brief Description:** Standard and custom stack capacitors with custom leads, encapsulated stack capacitors, custom assemblies, high temperature downhole assemblies, high power stacks.

**Customer Products:** Aircraft avionics, missile guidance systems, switch mode power supplies, downhole equipment.

<http://presidiocomponents.com/catalog/SMPS-StackedCapsBroRevF-Nov2016.pdf>

### HIGH VOLTAGE – RADIAL LEADED – MIL-PRF-49467 – Catalog 3001

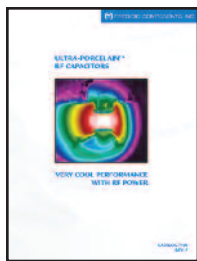


**Brief Description:** MIL-PRF-49467 products, Epoxy coated or uncoated, high voltage discs, high power/high frequency ceramics, temperature compensating ceramics.

**Customer Products:** Oil exploration, missile guidance systems, any product that requires operating temperatures from 150°C to as much as 300°C.

<http://presidiocomponents.com/catalog/HighVoltRadialLeadedMarch2018.pdf>

### ULTRA-PORCELAIN RF CAPACITORS – Catalog 7100



**Brief Description:** The best RF multilayer capacitor on the market today. All EIA case sizes available, high “Q,” ultra low ESL, combination lowest ESR and highest “Q,” ultra stable NPO.

**Customer Products:** High power amplifiers, tuning for PA, filter and oscillators, public and military radios, base stations, transmit and receive products, directional couplers, combiners/dividers.

<http://presidiocomponents.com/catalog/PorcelainCapsBrochureRevH-August2018.pdf>

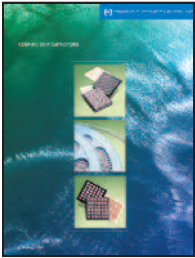
# APPLICATIONS

## 2.5 GHz to 100 GHz

**APPLICATIONS:** MMIC Amplifiers, Aircraft Avionics, Marine Radar Systems, Public Safety Radio and Base Stations, Military Radios, Cellular Base Stations, Transmit and Receive Equipment, Optical Transmit and Receive Equipment, Cellular LTE and 5G Products, Wire Bond Bypass for MMIC's, Broadband DC Blocking, Broadband Microwave Products, and Test Equipment.

**Presidio Product Catalogs Applications:** Catalog 5001, 2001, 7100, and 6100

### CERAMIC CHIP CAPACITORS – Catalog 5001



**Brief Description:** Standard and custom ceramic capacitors with standard EIA case sizes. Custom products include nonstandard case sizes, voltages, including high voltage, high temperature, high “Q,” custom leads.

**Customer Products:** Aircraft avionics, missile guidance systems, switch mode power supplies, phased array radar, transponders and receivers, all public and military radio's, optical transceivers.

<http://presidiocomponents.com/catalog/GeneralBro-CeramicChipsRevG-Dec2015.pdf>

### HIGH REL EXTENDED RANGE CHIPS FOR SPACE – Catalog 2001

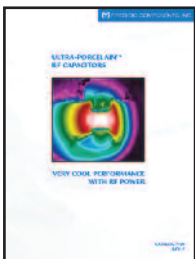


**Brief Description:** Space grade chip capacitors from EIA case sizes of 0201 to 2225. MIL-PRF-123 and NASA S-311.

**Customer Products:** Satellite and all space systems, filter, amplifiers, communication systems, oscillators, combiners, and all types of flight systems.

<http://presidiocomponents.com/catalog/HiRelExtendedRangeChipCapsRevH-May2018.pdf>

### ULTRA-PORCELAIN RF CAPACITORS – Catalog 7100

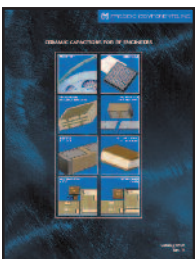


**Brief Description:** The best RF multilayer capacitors on the market today. All EIA case sizes available, high “Q,” ultra low ESL, combination lowest ESR and highest “Q,” Ultra stable NPO.

**Customer Products:** High power amplifiers, tuning for PA, filter and oscillators, public and military radios, base stations, transmit and receive products, directional couplers, combiners/dividers.

<http://presidiocomponents.com/catalog/PorcelainCapsBrochureRevH-August2018.pdf>

### CERAMIC CAPACITORS FOR RF ENGINEERS – Catalog 6100



**Brief Description:** Buried single layer capacitors, wire bondable vertical layer capacitors and surface mount buried broadband capacitors. These highly specialized capacitors are designed for band width stability over a wide temperature range.

**Customer Products:** Transponders and transceivers, broadband microwave, broadband test equipment, bypass for MMIC, high frequency filters and all chip and wire applications.

<http://presidiocomponents.com/catalog/RF-MW-F0Brochure6100RevI-May2018.pdf>

# SELECTION GUIDE

## Notes



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# SELECTION GUIDE

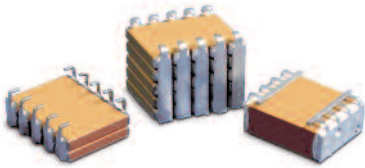
## Notes



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# PRESIDIO CUSTOM PRODUCTS



CUSTOM LEADS

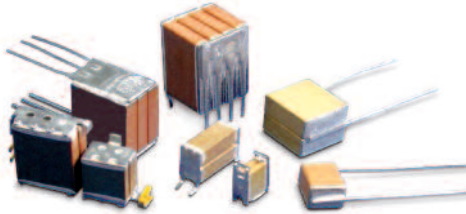
**PRESIDIO COMPONENTS, INC.** maintains more than 100 million standard commercial and military parts in inventory. If you need a custom product, call our engineering team.



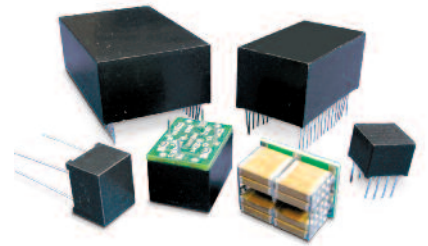
'S' LEADS

Custom products include non-standard part sizes and voltages such as high voltage, high temperature, high "Q", custom leads, cryogenic ceramics, negative and positive temperature characteristic ceramics, and piezoelectric formulations. European sizes are also available.

Backed with numerous patents and hundreds of years of combined experience, Presidio's engineering team is ready and able to create the ideal solution for any application.



CUSTOM STACKED  
CUSTOM ASSEMBLY



ENCAPSULATED



HIGH TEMP  
DOWNHOLE OIL

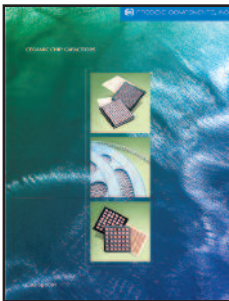


POWER-STACK™  
CAPACITORS



HIGH FREQUENCY  
HIGH POWER

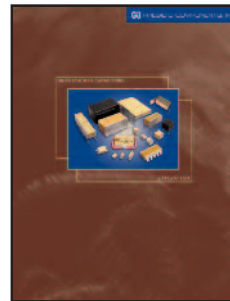
## MAIN PRODUCT CATALOGS



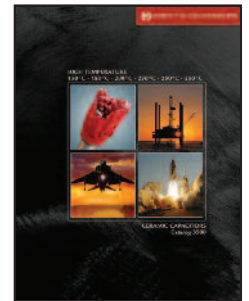
CERAMIC CHIP  
CAPACITORS



HIGH RELIABILITY  
EXTENDED RANGE  
CHIPS FOR SPACE



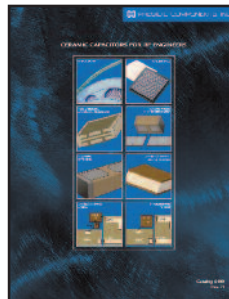
SMPS STACKED  
CAPACITORS



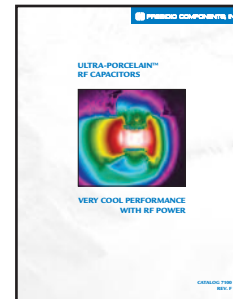
HIGH TEMPERATURE  
CERAMIC  
CAPACITORS



HIGH VOLTAGE &  
RADIAL LEADED PRODUCTS  
MIL-PRF-49467 CAPACITORS



CERAMIC CAPACITORS  
FOR RF, MICROWAVE &  
FIBER OPTIC APPLICATIONS



ULTRA-PORCELAIN™  
RF CAPACITORS