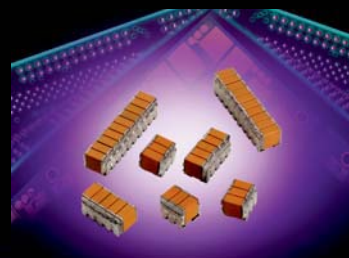
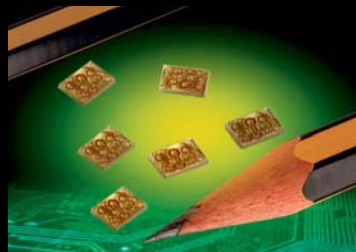
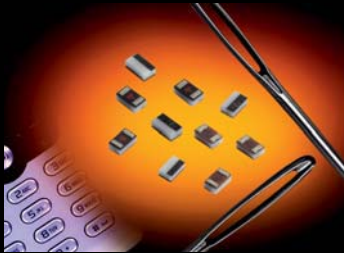
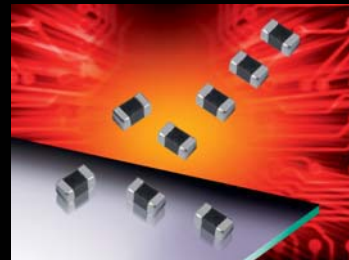


What's New @

AVX

A KYOCERA GROUP COMPANY

...TERS • CIRCUIT PROTECTION • PIEZO PRODUCTS • TIMING DEVICES • MODULE DEVICES • RF/MICROWAVE • PASSIVE MICRO-COMPONENTS
...SSIVE MICRO-COMPONENTS • CAPACITORS • CONNECTORS • FILTERS • CIRCUIT PROTECTION • PIEZO PRODUCTS • TIMING DEVICES • MODU
...RO-COMPONENTS • CAPACITORS • CONNECTORS • FILTERS • CIRCUIT PROTECTION • PIEZO PRODUCTS • TIMING DEVICES • MODULE DEVI
...ENTS • CAPACITORS • CONNECTORS • FILTERS • CIRCUIT PROTECTION • PIEZO PRODUCTS • TIMING DEVICES • MODULE DEVICES • RF/MICROW



AVX is the technology leader in the Passive electronic component and connector markets.

Each year AVX Corporation accepts the challenge of helping Design Engineers create superior products for their customers.

Our team of innovators around the world, utilize cutting edge research, design expertise and materials technology to develop solutions which improve performance, reduce total cost or provide miniaturization. Many of our latest product releases and soon to be released products are contained in this brochure.

For further details, or to obtain information on our broad range of existing products, please contact your local sales office.

SOLUTIONS ACROSS THE BOARD

Capacitors

Advanced Power Film
Ceramic
Disc
Film
Glass
High Voltage
Leaded / Through Hole
Low ESR
Low Inductance
Military / Aerospace
MLCC Array
MOS / MIS
Niobium Oxide* (OxiCap®)
RF / Microwave
(Power, Hi Q, Thin-Film)
Single Layer (SLC)
SMPS (Power Supply)
Stacked Ceramic
Supercapacitor (BestCap®)
Tantalum
Tantalum Polymer
Trimmer

Circuit Protection

Fuses (Thin-Film)
MLV (TransGuard®)
MLV Array (MultiGuard)
NTC Thermistors
Transient Voltage Suppressors
Zinc Oxide Varistors

Filters

EMI (Bolt-In and SMD)
EMI / TVS Filter
Feedthrough
High Current Feedthrough
Low Pass (Thin-Film)
SAW

RF / Microwave

Capacitors
Couplers
Inductors
PMC Custom Filters
Modules
Timing Devices
Passive Micro Components (PMC)

Integrated Passives

IDC (Low Inductance Array)
Passive Thick Film Array
Passive Micro Components (PMC)

Module Devices

Antenna Switch
Bluetooth™
LTCC
GPS
RX Module
WLAN Module

Piezo

Acoustic Devices
Actuators

Resistive Devices

Arrays
Low Resistance
Mini Axial
Thin-Film

Timing Devices

Ceramic Resonator
Clock Oscillator
Crystal Applied Product
MHz Crystal
SAW Resonator
TCXO

Connectors

2mm Hard Metric
Automotive – Custom
Battery
Board to Board
1 piece Compression
2 piece Microleaf
Card Edge
DIN41612
FFC / FPC
IDC
Memory Connectors
PCMCIA Kits
Compact Flash
SO-DIMM
SIMM / RUIIM
SDIO / SD
Military
PCI Express
Varicon Rack and Panel

*Niobium Oxide Capacitors are manufactured and sold under patent license from Cabot Corporation, Boyertown, Pennsylvania U.S.A.

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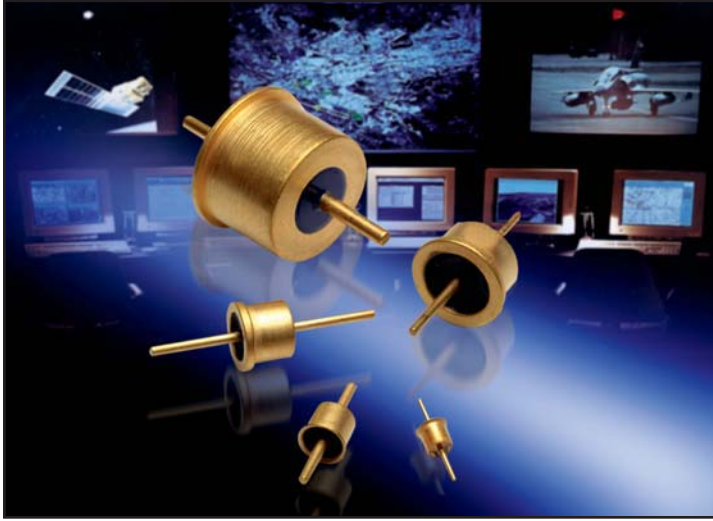
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Micro/Miniature Filter Series



Hermetically Sealed Solder in Filters

AVX has expanded on its popular line of micro and micro-miniature filters to include hermetically sealed solder in filters. These filters are ideal to use in microwave applications such as amplifiers, filters and power supplies. These filters can also be combined into a custom filtered arrangement to meet specific needs. These devices are available in C, L and custom configurations.

The frequency response is ideally suited in the 10MHz to 26GHz range and can withstand reflow temperatures as high as 300°C. Custom values, configurations and testing options are available. Consult AVX for details.

Applications:

- Medical
- General microwave
- Microwave amplifiers & tuners
- Space and avionics power supplies

Key Features/Benefits:

- Custom configurations
- Widest product offering
- Withstand 300°C solder reflow

EMI Bulkhead Series



Customized Array Filters & Filter Connectors

AVX has expanded on its popular EMI bulkhead filters to meet the ever growing demands and requirements of military, space, avionic and medical customers. This new product is a customized array of filters designed to meet the unique requirements of today's engineers.

AVX design engineers work side by side with customer engineers to define and develop these customized filters and customized filtered connectors to solve their problems. These filter connectors take the filtering off the board, saving valuable space, time and money by moving the filtering to the connector where it is needed the most.

Applications:

- Avionics
- Space equipment
- Radar systems
- Military power supplies
- Medical power supplies
- High reliability communications

Key Features/Benefits:

- Customized design
- Capability to add resistors, capacitors, inductors and diodes to the EMI Filter/Connector to meet filtering and signal shaping requirements

KVA Series



2012 & 1608 Size ESD Protected EMI Filter

KVA series is a distribution constant type EMI Filter that has the ESD protection function of four reams in the size of 2012 type and 1608 type. This series adopts the varistor material in dielectric characteristics rather than ceramic dielectrics used in the KNA series.

The KVA series have steep and wideband attenuation together with excellent ESD protection function.

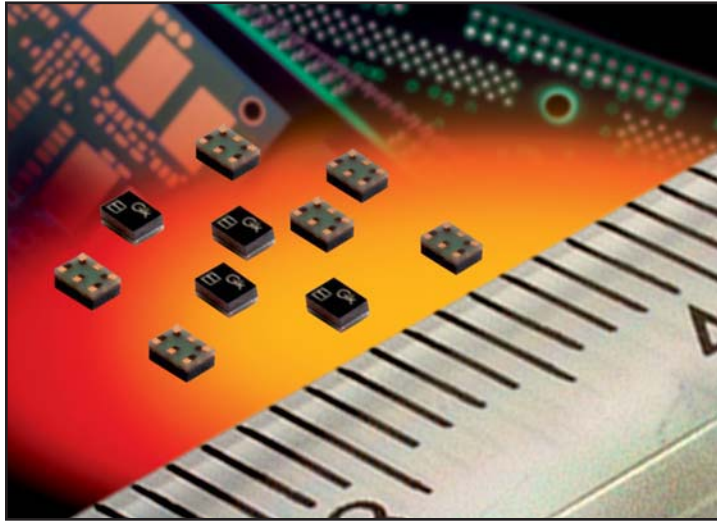
Applications:

- LCD line, camera line, bus line of portable device
- High speed bus line of digital device
- Interface line

Key Features/Benefits:

- ESD protection by using the varistor material
- High noise attenuation over wide frequency range by distributed constant LC circuit
- Suitable for high speed circuits preventing ringing caused by circuit impedance
- Miniature and low profile
(KVA21: 2.0 x 1.25 x 0.7mm /
KVA16: 1.6 x 0.8 x 0.6mm)

SF08 Series



World's Smallest SAW Filter (0.8 x 0.6 x 0.38mm)

The SF08 series SAW filters, measuring only 0.8mm x 0.6mm x 0.38mm, is intended for the use of mobile devices. SF08 series take the same CSP structure as SF14 series.

These filters have hermetic sealing structure, achieving high reliability against thermal and mechanical shock with excellent low loss and high attenuation.

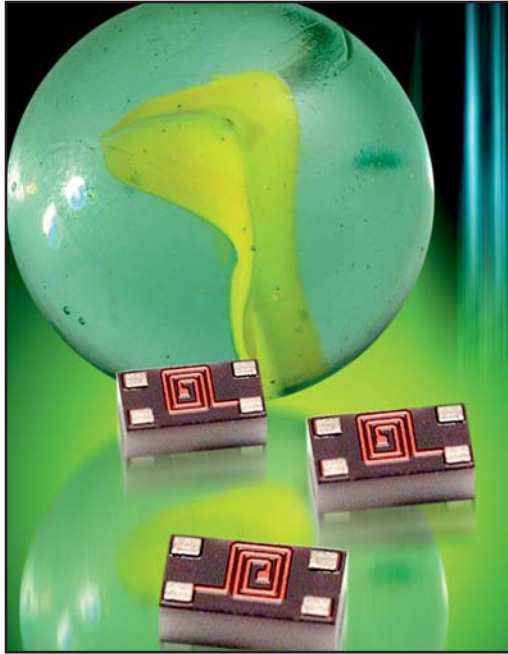
Applications:

- RF SAW filter for GSM/UMTS
 - GSM (Global System for Mobile communications)
 - UMTS (Universal Mobile Telephone System)

Key Features/Benefits:

- World's smallest size (0.8 x 0.6 x 0.38mm)
- Low loss and high attenuation
- High reliability due to hermetic sealing CSP structure
- RoHS compliant

LP0402N Series



LP0402N Series Harmonic Filters

AVX is pleased to announce the addition of the LP0402N series to its family of Low Pass Filters that already includes the LP0603 and LP0805. The new LP0402N series harmonic low pass filter is based on the proprietary RFAP thin film multilayer technology. The technology provides a miniature part with excellent high frequency performance and rugged construction for reliable automatic assembly.

The LP0402N series is available in frequencies up to 5.5 GHz with typical insertion loss of 0.2dB with high attenuation at second (~35dB) and third (~20dB) harmonics. RoHS compliant LGA terminations are standard.

Applications:

- Wireless communications
- Wireless LANs
- GPS
- WiMax

Key Features/Benefits:

- Inherent low profile
- Self alignment during reflow
- Excellent solderability
- Low parasitics
- Better heat dissipation

CAN Series



0402 CAN Transient Voltage Suppressor

The 0402 CAN TransGuard® is an application specific bi-directional transient voltage suppressor that was developed to provide a one chip solution for protecting miniature automotive modules from over voltage and radiated emissions.

Implementation of an AVX 0402 CAN TransGuard® can save designers approximately 90% of the board area required by current solutions.

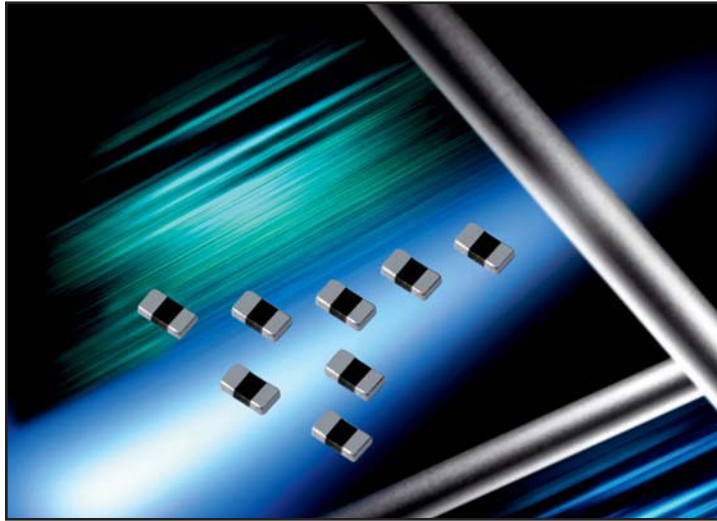
Applications:

- CAN transceivers
- Automotive

Key Features/Benefits:

- Low profile 0402 case size
- Off state EMC capacitance
- On state bi-directional protection
- Jump start capability
- Fastest response time to ESD strikes
- High reliability
- Superior energy and inrush rating compared to diodes

VCH4AG Series



Sub 1pF Multilayer Varistor

The sub 1pF TransGuard® is an application specific bi-directional transient voltage suppressor that was developed to provide a one chip solution for protecting high speed digital interfaces, RF antenna and RF amplifier circuits against ESD events.

Placing a transient suppressor in a signal line introduces the TVS's parasitic capacitance. This parasitic capacitance can integrate the rise time and fall time of any signal and inject other types of distortion of the signal.

Minimizing the parasitic capacitance will maximize the signal speed and minimize the signal distortion.

Applications:

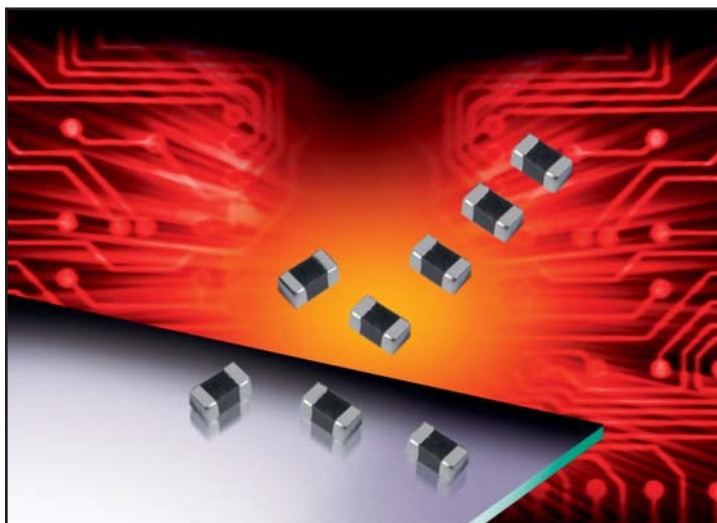
Any application with high data speed rates and/or RF circuitry. Specifically:

- HDMI
- FlexRay
- High-speed digital
- Analog sensors
- RF circuits

Key Features/Benefits:

- High reliability
- Capacitance <1pF
- Bi-Directional protection
- Fastest response time to ESD strikes
- Withstand 1k strikes at 8kV (IEC 61000-4-2)
- Low insertion loss
- Low profile 0402 case size

VC0402 Series



Controlled Cap Multilayer Varistor

The controlled cap TransGuard® is an application specific bi-directional transient voltage suppressor that was developed for use in mixed signal environments.

The controlled cap MLV has three purposes:

- to reduce emissions from a high speed ASIC
- to prevent induced E fields from conducting into the IC
- to clamp transients voltages

The controlled cap MLV is offered in the E6 capacitance range with tolerances of $\pm 20\%$. By controlling capacitance of the MLV, the center frequency and 20db range for filtering purposes can be targeted. A controlled cap MLV can greatly improve overall system EMC performance and reduce system size.

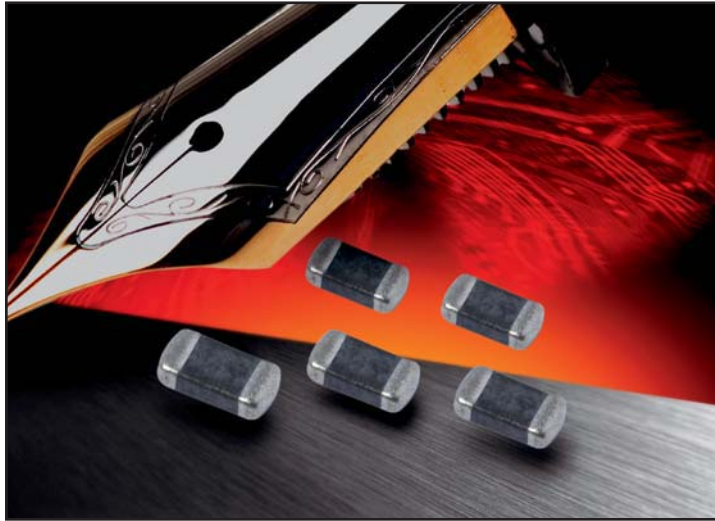
Applications:

- Multiplex buses
- BUS drivers
- LCD touch screens
- Squib lines
- Data over power
- Speaker/Microphone circuits
- PDAs

Key Features/Benefits:

- E6 capacitance range from 10pF to 100pF
- Capacitance tolerance $\pm 20\%$
- Bi-Directional protection
- Fastest response time to ESD strikes
- Withstand 1k strikes at 8kV (IEC 61000-4-2)
- 0402 case size
- Combined EMI and transient suppression

VC120618 Series



Max Cap 1206 Multilayer Varistor

AVX is the first to offer Zinc Oxide based maximum capacitance Multilayer Varistors to the market. The max cap TransGuard® is an extension of the 1206 case size family in our standard TransGuard series. Capacitance value is 10nF in the 1206 case size. Future development will include 10nF in a 0805 case size.

The 1206 10nF max cap MLV is designed to suppress inductive decay transients and to suppress EMI from relay and motor circuits.

The use of this device greatly improves a systems capability to meet radiated emissions as required by many auto, military and consumer specifications.

Applications:

- Automotive
- Industrial control
- Avionics
- Power management
- Alternate energy remote location inverters and power monitors

Key Features/Benefits:

- High reliability
- Capacitance 10nF
- Bi-Directional protection
- Fastest response time to ESD strikes
- Withstand 1k strikes at 8kV (IEC 61000-4-2)
- 1206 case size available now, 0805 future development

CX2016SB Series



2016 Size Ultra Small & Low Profile SMD Crystal

CX2016SB series is a miniature quartz crystal with dimensions 2.0 x 1.6 x 0.45mm, and offers tight tolerance for mobile communication with better sensitivity performance. The low profile design fits into module devices.

The compact design of CX2016SB series is suitable for handheld devices, short range communication products, and digital consumer goods which require downsizing and low power consumption.

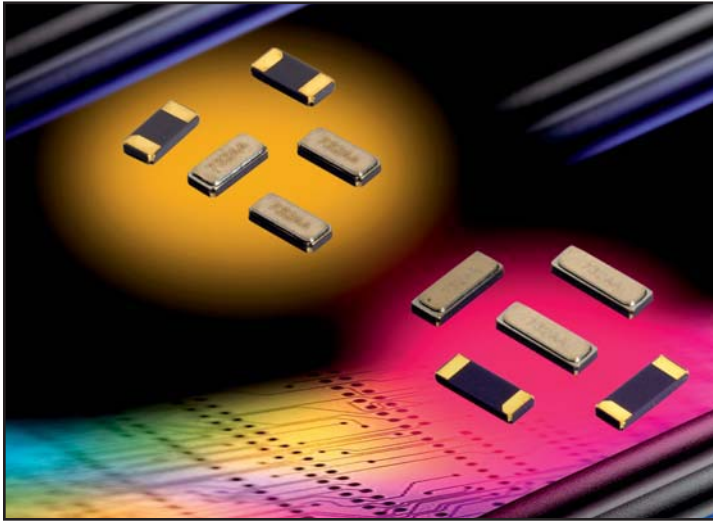
Applications:

- Mobile communications, Bluetooth™, WiFi
- Module devices
- Medical
- General consumer

Key Features/Benefits:

- Ultra miniature and low profile (2.0 x 1.6 x 0.45mm)
- A lead free product in compliance with RoHS
- High reliability by ceramic package and shielding technology
- Better sensitivity

ST Series



SMD 32.768KHz Tuning Fork Type Crystal

ST3215SB and ST4115SB series are small and low profile 32.768KHz SMD crystals. Their small and low profile design is made to fit into mobile phones, general consumer, and hand-held equipment. Ceramic package and sealing technology contribute to realize high reliability.

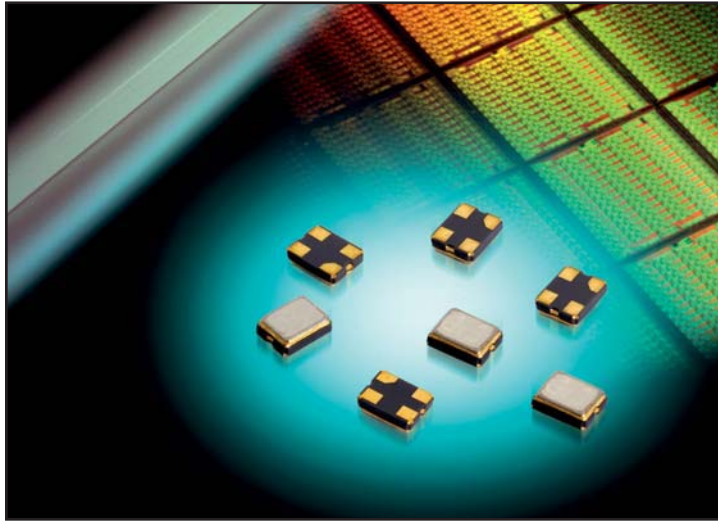
Applications:

- Mobile communications
- Bluetooth™
- WiFi
- Module devices
- General consumer

Key Features/Benefits:

- Miniature and low profile (3.2 x 1.5 x 0.75mm)
- A lead free product in compliance with RoHS
- High reliability by ceramic package and shielding technology
- Better sensitivity

KC2520C Series



Tightest Stability Clock Oscillator for Wireless Network

The KC2520C series Clock Oscillator, measuring only 2.5 x 2.0 x 0.7mm, is intended for the use of Bluetooth™, Wireless LAN/WiFi (802.11x).

The excellent power saving characteristic can fit small portable equipment, which requires space constraint devices. The KC2520C secure enough output amplitude (min. 90% vs input vol.).

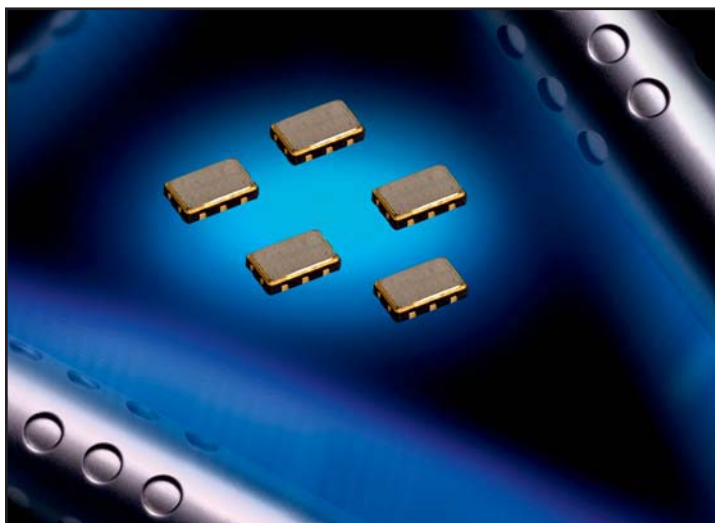
Applications:

- Bluetooth™
- Wireless LAN

Key Features/Benefits:

- World's tightest stability clock oscillator ($\pm 10\text{ppm}$ @ $-10 \sim 70^\circ\text{C}$, $\pm 10\text{ppm}$ @ $-40 \sim 85^\circ\text{C}$)
- Miniature and low profile (2.5 x 2.0 x 0.7mm)
- Low current consumption Typ 1.7mA @ 26MHz/CL15pF/2.5V
- Excellent phase noise
- Wide supply voltage coverage (2.25~3.63V)
- High output amplitude for heavy load circuit (ex. Bluetooth™, Wireless LAN combination IC)
- RoHS compliant

KC5032E-C3 Series



Spread Spectrum Surface Mount Clock Oscillator

KC5032E-C3 series is a surface mount spread spectrum CMOS output clock oscillator with a 5.0 x 3.2 x 1.1mm size. The built-in spread spectrum function reduces EMI noise level without additional filter components.

High reliability is accomplished due to the ceramic package's seam welding sealing technologies.

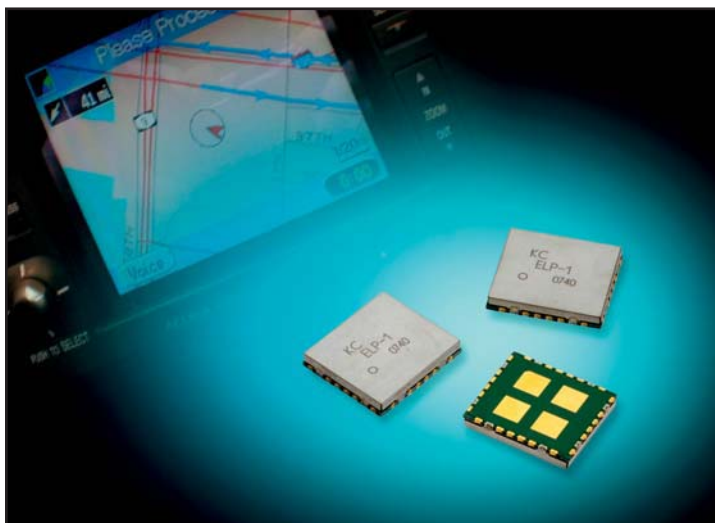
Applications:

- Automotive
- Digital equipment
- Video game systems

Key Features/Benefits:

- Built-in spread spectrum function to reduce EMI noise
- CMOS output
- Supply voltage: $V_{CC}=3.3V$
- High reliability with seam welding

FGS Series



GPS Module FGS3ELP-PX-1

The FGS series GPS module adopts SiRF's GSC3eLP chipset satisfying AEC-Q100 and includes flash memory with a small and low profile package. The GPS module has high tracking sensitivity and high speed TTFF characteristics.

The FGS Series has an operation temperature range of -30°C to +85°C and a storage temperature range of -40°C to +85°C.

Applications:

- Automotive
- Personal navigation device (PND)
- GPS function for industrial use
- GPS function for consumer product

Key Features/Benefits:

- Excellent tracking sensitivity: -158dBm
- Excellent TTFT performance: 1sec (at -130dBm) for hot start / 36sec (at -130dBm) for cold start

FQ01UAB-PA Series



Bluetooth™ Module Version 2.0 + EDR

The FQ01UAB-PA Bluetooth™ module adopts Qualcomm's BTS4020 chip. The module is compliant with Bluetooth™ Version 2.0 and EDR.

The module is highly sensitive with a small size (4.5 x 4.5 x 0.97mm) and low profile (0.97 mm typ.) design. The FQ01UAB-PA module has excellent power performance at 0dBm typical. The module complies with Bluetooth™ Class 2. A band pass filter was built inside of LTCC to achieve a small package size.

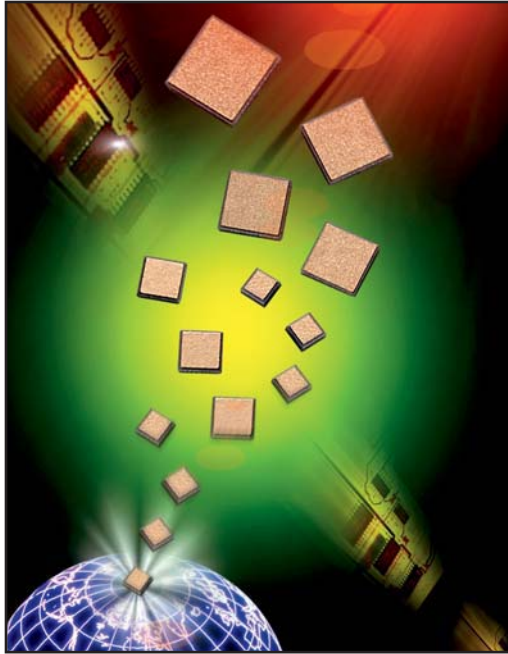
Applications:

- Cellular phone

Key Features/Benefits:

- Excellent power performance
- High sensitivity - 84dBm typical

MIS / MOS Series



MIS / MOS Capacitors

RF/MICROWAVE

These are Single Layer Capacitors (SLCs) that use Silicon Nitride or Silicon Dioxide to produce small, high Q, temperature stable, high breakdown voltage, low leakage capacitors. To ease assembly, AVX offers a wide range of termination styles for epoxy attach and gold or aluminum wire thermosonic and ultrasonic bonding.

Applications:

MIS / MOS capacitors provide reliable and stable performance in RF to microwave applications up to the GHz range. For example, in cell phone power amplifiers, as reference capacitors in test equipment, or in extreme reliability applications including military and space.

Key Features/Benefits:

- SiON dielectric up to 100V applications
- SiO₂ dielectric up to 50V applications
- Sizes as small as 10 mils (254 μ m) squared. DC to GHz operation.
- Current custom sizes up to 6 x 2mm
- Several hundred pF @ 16V designs
- High Q, low leakage

Comments/Additional Input:

Custom applications and designs are welcome.

MX Series



X7R MIM Capacitors

RF/MICROWAVE

These Single Layer Capacitors (SLCs) use a true X7R thin film dielectric that offers high capacitance for low voltage applications. To ease assembly, these devices come as gold wire bondable top only or top wire bond with bottom conducting die attach.

MIM capacitors provide reliable and stable performance from RF to microwave applications up to GHz range, X7R. For example, for low height smart card or height restricted circuits they can be used as a direct replacement for 0402 or 0201 MLCCs when high frequency bulk capacitance or decoupling is required.

Applications:

Targeting ultra-thin on-package decoupling or power delivery in:

- Medical
- Telecommunications
- Military

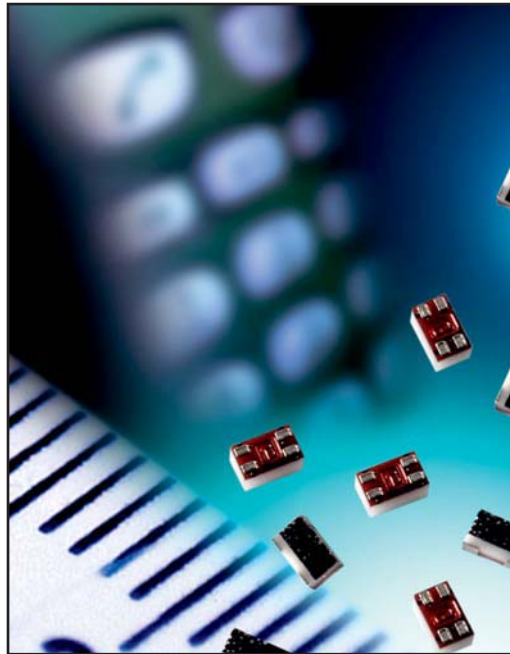
Key Features/Benefits:

- Top side only or traditional top and bottom side wire bond terminations available
- 15000 pF / mm² @ 5V up to 25000 pF / mm² @ 3V bulk capacitance
- Frequency of operation \leq 5 GHz

Comments/Additional Input:

Custom applications and designs are welcome.

CP0402P Series



CP0402P High Directivity, Tight Coupling Tolerance

The CP0402P series is the latest addition to AVX's industry leading high directivity coupler product line. The new CP0402P series offers the tightest coupling tolerance available in the market at $\pm 0.5\text{dB}$. The CP0402P is a RoHS compliant LGA terminated coupler that is based on the proprietary RFAP thin film multilayer technology of AVX. This technology provides a miniature part with excellent high frequency performance and rugged construction for reliable automatic assembly.

Available in operating frequencies from 400MHz to 6GHz with coupling factors from 7.5 to 30dB and directivity as high as 27.

Applications:

- Wireless communications
- Wireless LANs
- GPS
- WiMax

Key Features/Benefits:

- Inherent low profile
- Self alignment during reflow
- Excellent solderability
- Low parasitics
- Better heat dissipation

DB0603N Series



DB0603N 3dB 90° Couplers

RF/MICROWAVE

The DB0603N Series 3dB 90° Couplers are the latest additions to AVX's coupler product line. Joining the DB0805 family they are the smallest 90° couplers currently offered on the market. These couplers are built based on AVX's proprietary RFAP Thin-Film multilayer technology. The technology provides a miniature part with excellent high frequency performance and rugged construction for reliable automatic assembly.

The DB0603N Series 3dB 90° Couplers are offered in a variety of frequency bands compatible with various types of high frequency wireless systems.

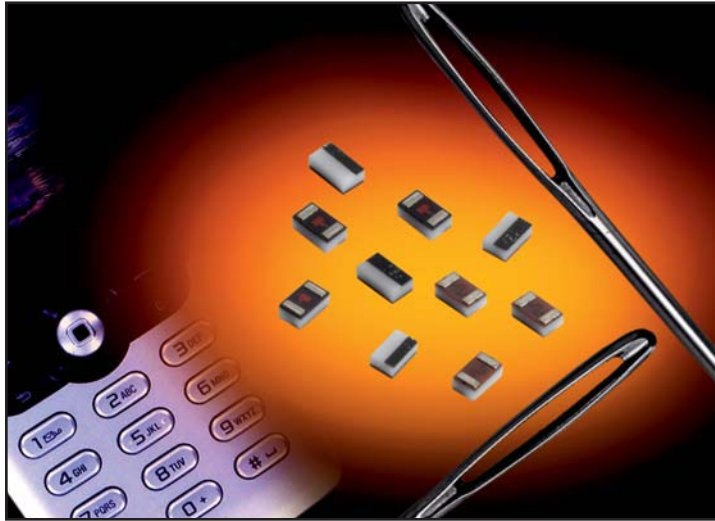
Applications:

- Balanced amplifiers
- Signal distribution in wireless communications
- WiMax

Key Features/Benefits:

- Miniature 0603 size
- Low insertion loss
- High isolation
- Surface mountable
- RoHS compliant

L0402 Series



L0402 Tight Tolerance RF Inductor

RF/MICROWAVE

AVX is pleased to announce the addition of the L0402 inductors to its family of Hi-Q surface mount inductors, joining the existing L0603 and L0805. The L0402 is available in the tightest tolerances available on the market. The L0402 LGA inductor is based on thin film multilayer technology. The technology provides a miniature part with excellent high frequency performance and rugged construction for reliable automatic assembly.

The L0402 inductors are available from 0.82nH to 6.8nH with tolerances as tight as $\pm 0.05\text{nH}$. LGA terminated in 100% tin (RoHS compliant), the inductors exhibit Hi-Q and High Power Handling.

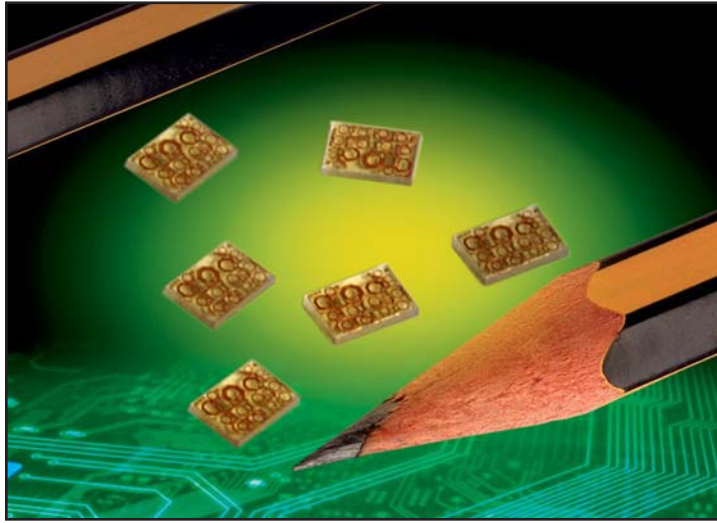
Applications:

- Mobile communications
- Satellite TV receivers
- GPS
- Vehicle location systems
- Wireless LANs
- Filters
- Matching networks

Key Features/Benefits:

- Inherent low profile
- Self alignment during reflow
- Excellent solderability
- Low parasitic
- Better heat dissipation

Custom Filter: Diplexer



IPD Custom Thin Film Filters

To provide designers with miniaturization, integration, and critical filter function, AVX now offers custom thin film filters. The AVX PMC group offers unique design solutions by combining HFSS modeling and established materials expertise.

Design examples include low pass, high pass, band pass, diplexers, and triplexers. Terminations include ball grid array (BGA), land grid array (LGA), or gold and aluminum wire bondable.

Applications:

- Medical
- Military
- Industrial
- Telecom
- Applications where space savings and signal integrity are critical

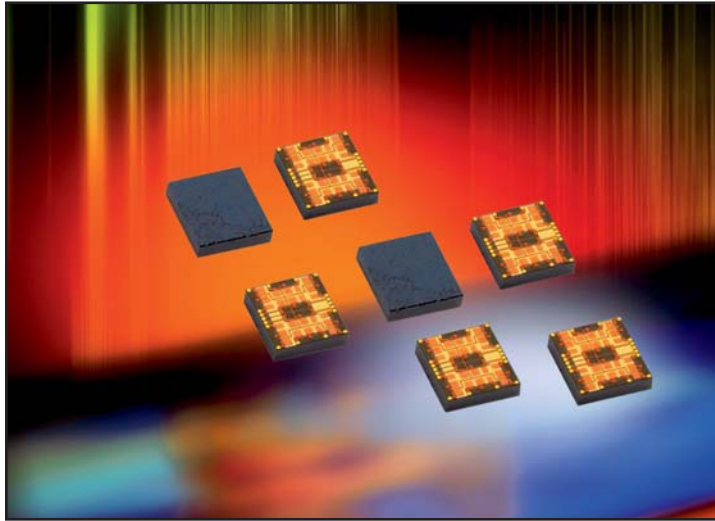
Key Features/Benefits:

- Ideal for complex designs
- Stable reproducible NPO thin film capacitor with laser trimming as an option
- Thin film inductors with up to 3 turns in 2 levels from 0.5 to 20nH with $Q < 80$
- Excellent materials / modeling agreement

Comments/Additional Input:

Custom applications and designs are welcome.

PMC RC Modules



Thin Film Modules

To provide designers with miniaturization, integration, and precision tolerance, AVX now offers Thin Film Modules. Combining industry leading resistor, capacitor, and inductor materials AVX now offers designers unique capabilities not available with traditional surface mount or LTCC style modules. These advantages include resistor values from 47 ohms to 20 megohms, and TCRs from +25 to 250 ppm for SiCr. NP0 capacitors with +30 ppm/°C stability, and high Q < 80 copper inductors.

Typically, PMC module designs are “two level” layouts which can combine PMC resistors, capacitor, and inductors with or without trimming on the first level. The second level which is connected through copper vias to the first is suitable for customer selection of desired active devices, bulk passives, or other components to meet their design requirements.

Applications:

- Medical
- Military
- Industrial
- Hybrid
- Telecom
- Applications where space savings and precision tolerance module designs are critical

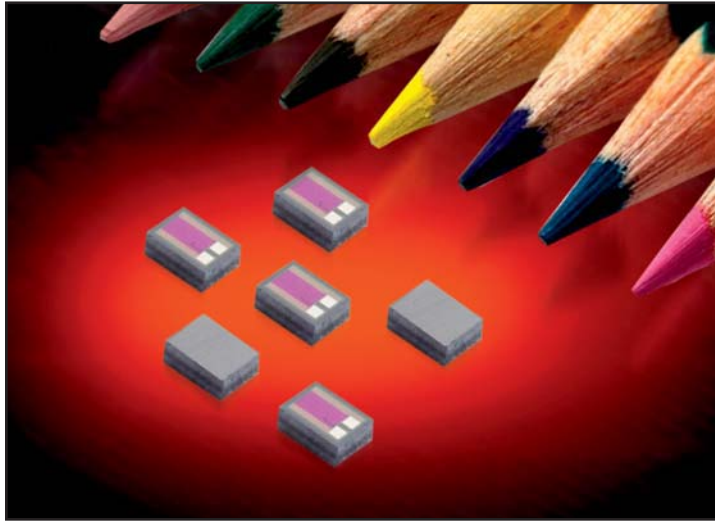
Key Features/Benefits:

- Materials, tolerances, and space saving unique to PMC thin film technology and not available using tradition surface mount or LTCC designs

Comments/Additional Input:

Custom applications and designs are welcome.

IPD TaN Series



Precision Laser Trimmable Resistor Networks

To provide designers with miniaturization, integration, and precision tolerance, AVX now offers thin film SiCr low and high voltage (5000V) and TaN resistors. Offering industry leading SiCr material with the unique properties of very high resistivity and tailorable TCR. Customers can select resistor values from 47 ohms to 20 megohms, and TCRs from +25 to 250 ppm for SiCr.

AVX also offers TaN resistor materials with a TCR of -100 to -150 ppm in 0.5 ohms to 1 megohms resistance ranges. Both the SiCr and TaN materials are currently medically implantable qualified. Termination options include ball grid array (BGA), land grid array (LGA), or gold or aluminum wire bondable. AVX thin film resistors offer advantages designers need and demand.

Applications:

- Medical
- Military
- Industrial
- Hybrid
- Automotive
- Telecom
- Applications where space savings, precision tolerance, and low leakage are critical

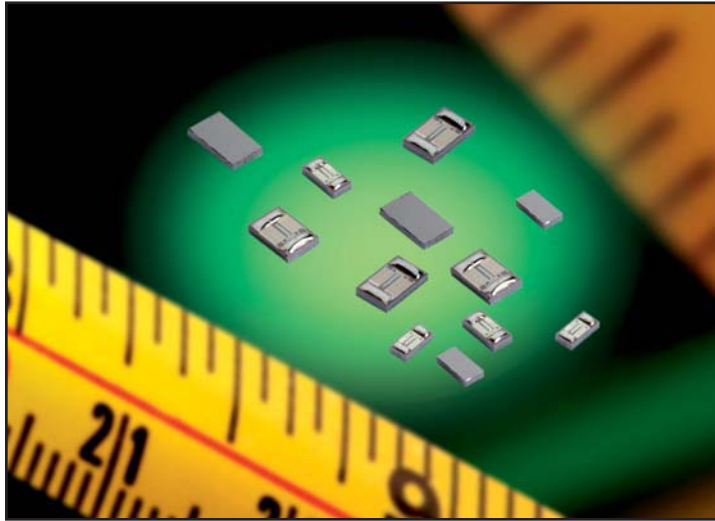
Key Features/Benefits:

- SiCr materials offer an industry leading blend of high resistance up to 20 megohms in conjunction with adjustable TCR from +25 to 250 ppm.
- PMC materials and processing expertise allow these products to be offered as laser trimmed devices, or devices that can be trimmed at the customer, “in-circuit” for unsurpassed tuning

Comments/Additional Input:

Custom applications and designs are welcome.

PLTCs Series



Precision Laser Trimmable Capacitors

To provide designers with precision tolerance surface mount capacitors, AVX now offers thin film PLTCs (Precision Laser Trimmable Capacitors). PMC materials and processing expertise allow these products to be offered as “trimmed” devices, or as devices that can be trimmed “in-circuit” for unsurpassed tuning.

Examples include:

- 0402, 14pF maximum capacitance, with a 0.02pF trim step
- 0603, 16pF maximum capacitance, with a 0.02pF trim step
- 0603, 50pF maximum capacitance, with a 0.1pF trim step
- 0805, 60pF maximum capacitance, with a 0.02pF trim step

Land grid array (LGA) lead free or lead based terminations are available.

Applications:

- Medical
- Military
- Industrial
- Hybrid
- Telecom
- Applications where precision tolerance is critical

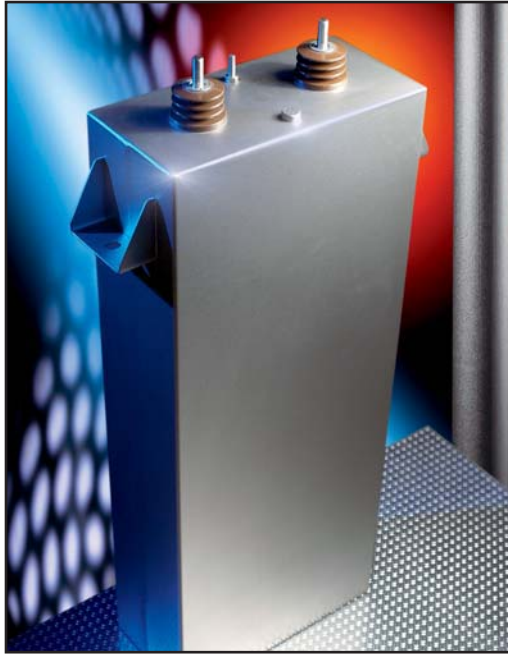
Key Features/Benefits:

- 0.02pF capacitance trim steps offering unmatched tolerances
- NP0 dielectric
- Nonmagnetic
- Typical operational voltage of 50V
- Frequency of operation < 500MHz, resonance of >2.5GHz.

Comments/Additional Input:

Custom applications and designs are welcome.

TRAFIM Series



New DC Filtering Capacitor TRAFIM Evolution Level 7

In order to continue to offer the best solution in a DC filtering capacitor, AVX is launching its latest evolution of TRAFIM series, the TRAFIM level 7. It offers the highest specific volumic energy available on the market, long lifetime expectancy, (can be up to 30,000 hours), a proven reliability, a totally safe operation, no catastrophic failure, and no explosion risk.

AVX is still using the well-known “Controlled Self Healing” technology. Voltage range is from 1200Vdc to 100kVdc.

Applications:

- DC filtering: Traction: from light rail equipment up to heavy and high speed trains
- Industrial: motor drives, windmills, energy distribution

Key Features/Benefits:

- Long lifetime expectancy
- Very high reliability
- Total safety
- Highest specific energy on the market

FFVS Series



NEW Very Low Stray Inductance DC Filtering Capacitor

AVX power products launch a new range of DC filtering capacitor for high frequency ripple. The FFVS series is based on the same external design as the FFVE and FFVI ranges, but with a very low stray inductance from 8nH to 16nH.

These products utilize AVX controlled self-healing technology, which guarantees long lifetime expectancy, total reliability and no catastrophic failure.

Applications:

The FFVS Series works best where high frequency ripple for DC filtering is required:

- Hybrid and electric vehicles
- DC filtering for induction heating
- DC filtering for high frequency resonant power supplies
- DC filtering for medical equipment

Key Features/Benefits:

- Long lifetime expectancy
- Very high reliability
- Total safety
- Highest specific energy on the market

TAW Series



Fused Tantalum Capacitor

TAW fused tantalum capacitors offer protection from possible damaging short circuit failure modes. This is accomplished with an internal fuse using thin film technology that is connected in series with the capacitor.

The AVX fused tantalum capacitors provide lower ESR limits compared to conventional fused tantalum capacitors. The TAW series is also available in a military version named the TBW series.

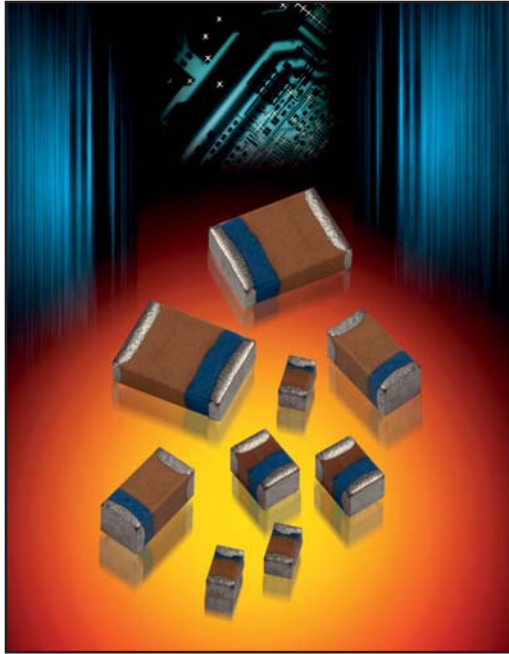
Applications:

- Servers
- Telecommunications
- High reliability applications

Key Features/Benefits:

- Lead-free compatible technology
- Fail-safe function
- Lower ESR compared to competition
- SMD built-in fuse provide better repeatability, consistency and reliability compared to competition

TBC Series



CWR15 Military Approved Microchip

The TBC series is a military approved tantalum chip capacitor. The CWR15 offers 0603, 0805 and 1206 case sizes in capacitance/ voltage combinations previously only available in much larger packages.

The revolutionary TBC series technology offers designers significant opportunity to downsize circuits for military and aerospace applications. Also available in a COTS-Plus Weibull Grade extended range version.

Applications:

- Satellite
- Avionic
- Applications requiring high reliability in the smallest / lightest package

Key Features/Benefits:

- Weibull grade reliability
- Small size / lowest weight
- Qualification ratings from 4V to 20V

TBJ Series



TBJ COTS+ Tantalum Capacitor

The TBJ series COTS+ low ESR tantalum capacitor has been updated to include qualification to the new DSCC drawing DSCC 07016.

This new DSCC drawing includes full Weibull reliability grading and all surge test options per MIL-PRF-55365. TBJ COTS+ DSCC 07016 offers capacitance voltage ratings higher than those of MIL CWR11 in the same case sizes.

The TBJ series is available in “EIA” standard sizes:

- A = 3216
- B = 3528
- C = 6032
- D = 7343
- E = 7343-43
- V = 7361

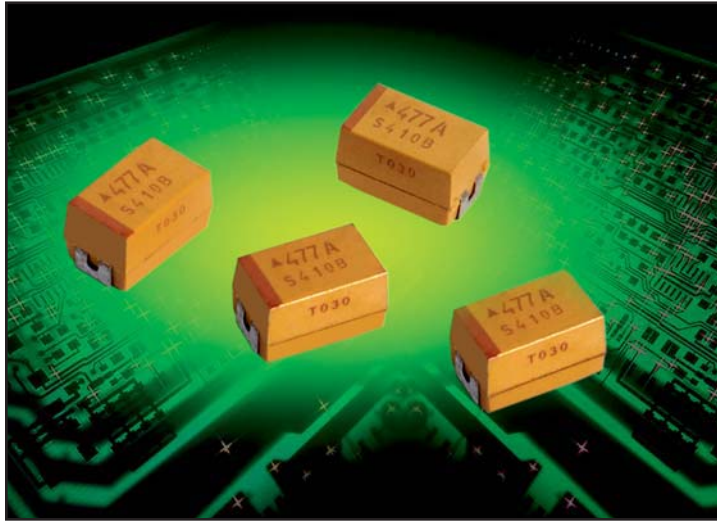
Applications:

- Avionic applications requiring a high reliability / flight version of EIA standard size commercial tantalum capacitors

Key Features/Benefits:

- Weibull reliability grading and surge test options
- Low ESR ratings (cases A through E)
- CWR11 form factor in standard and extended ratings

TBM Series



TBM High Reliability Ultra Low ESR Tantalum Capacitor

TBM high reliability ultra low ESR tantalum chip extends the low ESR range offered by TBJ / DSCC 07016 and provides more options for designers of mission-critical systems to achieve the filtering required for emerging power and high-speed digital applications.

Using an internal multi-anode construction, all ratings are available in standard TBJ E case size. TBM series has SnPb termination as standard and a wide range of voltage ratings (2.5v to 35v), with a capacitance range from 6.8 μ F to 1500 μ F

TBM is supplied with Weibull "B" grade reliability and all MIL-PRF-55365 surge options.

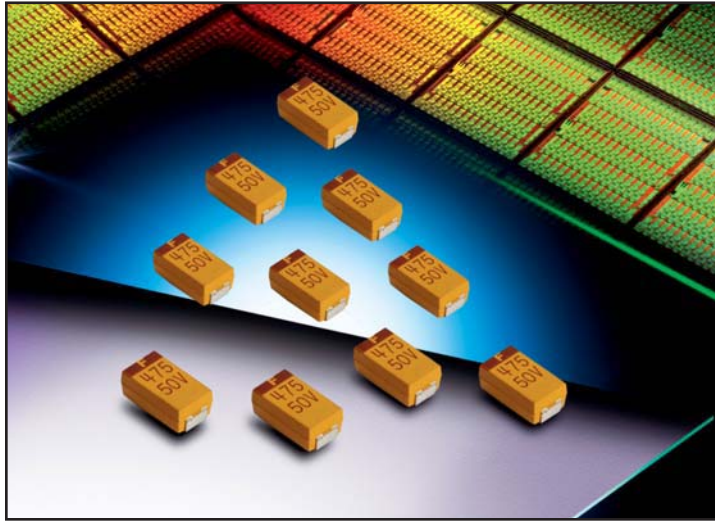
Applications:

- Avionic
- Satellite
- Coupling
- Bypass
- Power supplies

Key Features/Benefits:

- Lowest ESR tantalum chip available with Weibull Grading & MIL surge options
- Offers all ratings in one standard case size
- TBM is currently the only full range high reliability ultra low ESR tantalum capacitor

FUSECAP® TBW Series



Fused Tantalum Chip Qualified to DSCC 04053 with Weibull Grade Option

FUSECAP® TBW series fused tantalum chip, qualified to DSCC 04053, is the only fused tantalum that incorporates a fast-acting, fail-safe thin film fuse. The thin film fuse enables TBW series to achieve low ESR and high ripple ratings.

Parts can be ordered by DSCC 04053 part number for standard reliability or by AVX TBW part number for Weibull grade reliability. The FUSECAP® TBW series is available in “EIA” standard sizes D (7343).

CAPACITORS

Applications:

- Ideal for high current / low impedance avionic power filtering applications (e.g. radar) requiring banks of tantalum for bulk capacitance
- The Weibull grade version is recommended for any mission-critical design that can incorporate the FUSECAP® open mode failure mechanism

Key Features/Benefits:

- Fuse tantalum chip incorporating fail-safe, low ESR thin-film fuse technology.
- Weibull grade reliability available

TCP Series



TCP Tantalum Surface Mount Modules

TCP series tantalum surface mount modules provide maximum packaging density for critical power filtering applications.

The standard series is configured in stacks of two, four, or six low ESR tantalum chips to provide maximum capacitance, lowest ESR and highest ripple current ratings with greatest volumetric efficiency. Beyond these configurations, AVX is able to offer a wide range of custom configurations including parallel / serial arrays and fused options.

The individual tantalum chips used in the modules can be supplied with Weibull grade reliability and all MIL-PRF-55365 surge options.

Applications:

- Avionic
- Satellite
- Radar

Key Features/Benefits:

- TCP modules offer the highest volumetric efficiency configurations for surface mount tantalum with available ratings ranging from 2000 μ F at 6V DC to 28 μ F at 50V DC
- Fused and custom configurations are available – contact AVX

TLJ Series



Tantalum High CV Consumer Capacitors

The consumer TLJ series of tantalum capacitors offer highest capacitance vs. voltage ratio based on stable MnO₂ electrode capacitors. The TLJ series complies with RoHS requirements and it is an environmentally friendly component ready for lead-free assembly systems up to 3x reflow with 260°C peak temperature.

The TLJ series is suitable for a wide range of consumer electronic applications such as the latest portable handheld electronics, cellular phones, PDA or other digital equipment and cameras.

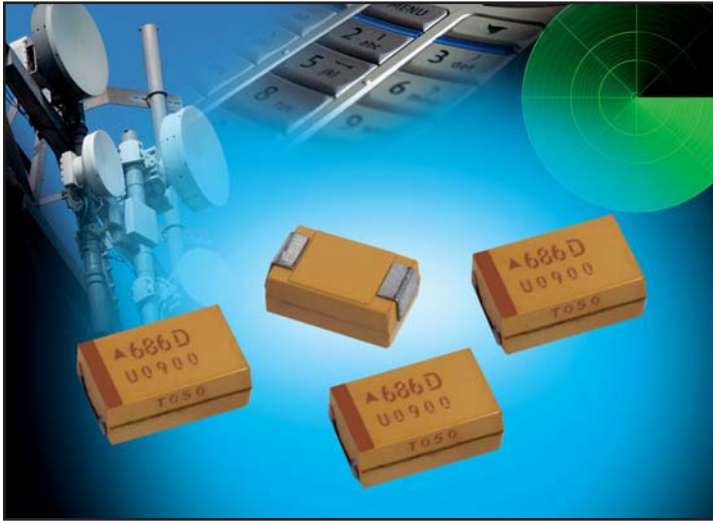
Applications:

- Consumer electronics
- Portable hand-held electronics
- Cellular phones, PDAs
- Digital cameras

Key Features/Benefits:

- High volumetric efficiency
- Environmentally friendly
- Small & low profile cases
- 100% surge screening 3x reflow 260°C compatible
- Consumer applications

TPM Series



Tantalum Ultra Low ESR Multianode Capacitor

Low ESR, high capacitance and high ripple current are the key parameters for processor filtering. Multianode configuration within a standard E case package meets these requirements.

Parameters such as ESR $15\text{m}\Omega$, capacitance $1500\mu\text{F}$ and ripple current above 4A rms makes TPM series ready to use with the latest processor families. TPM D case capacitors in addition are using a “mirror” multianode construction that reduces self-inductance ESL from 2.4 nH to 1.0 nH and thus frequency range is extended to about 500 kHz .

Applications:

- Telecommunication / Networking
- Servers
- Industrial

Key Features/Benefits:

- Super low ESR
- Multianode construction
- 100% hard surge screened D case size in mirror design

TRJ Series



Professional Tantalum Capacitors

The TRJ surface mount series employs established tantalum technology together with new process improvements and advanced manufacturing techniques. This robust series enables to achieve twice better reliability compare to the standard tantalum specification. The moisture penetration barrier, thicker external dielectric layer and modified manganese process make the capacitor more robust against higher thermo-mechanical stresses during assembly process.

Low ESR option is now available within the TRJ series. The low ESR offer higher power output capabilities within the same instrument size or downsizing and reduced number of capacitors in parallel configuration.

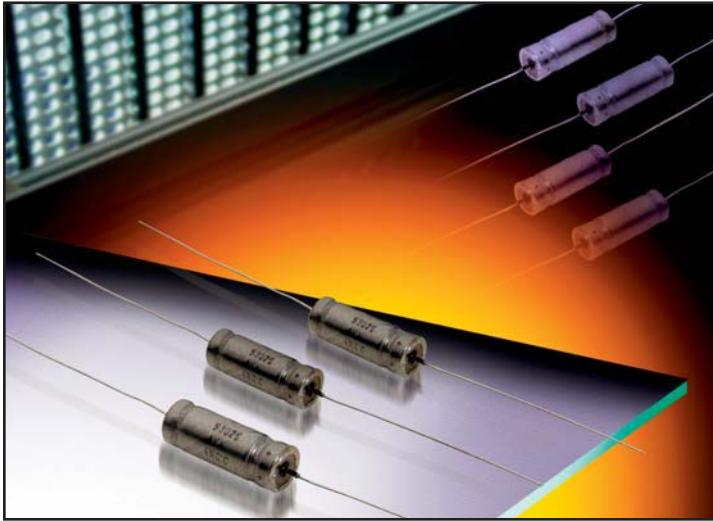
Applications:

- Aerospace
- Military
- Medical
- Industrial
- Automotive

Key Features/Benefits:

- High reliability commercial parts
- Low ESR option available
- Robust design and manufacturing process

TWA Series



TWA Wet Tantalum Capacitors

TWA series axial leaded wet tantalum, qualified to DSCC 93026, incorporates proprietary technology that enables higher capacitance / voltage ratings than competing series, together with lower ESR and higher ripple ratings.

TWA is available in standard case sizes per MIL 39006 and can be used for both legacy programs and new applications. TWA series has voltage ratings from 25V to 125V and capacitance values from 10 μ F to 2200 μ F.

CAPACITORS

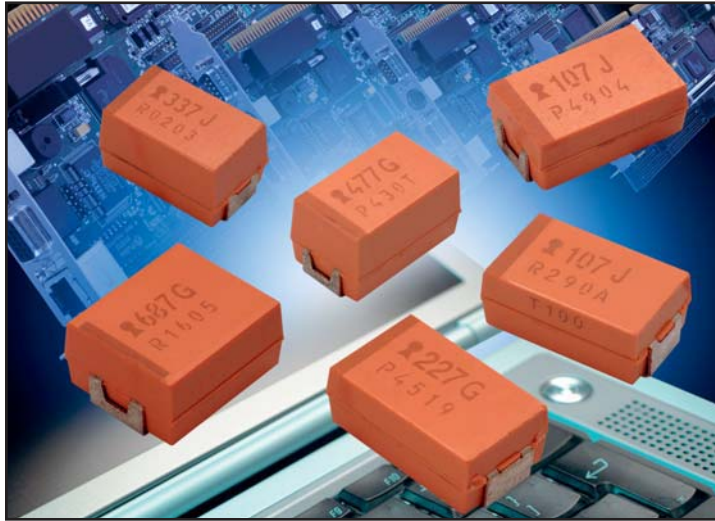
Applications:

- Avionic engine control and rapid discharge applications requiring high reliability, high DC bulk capacitance and low leakage current

Key Features/Benefits:

- Wet tantalum characteristics (high capacitance / voltage, low DC leakage) combined with highest CV / lowest ESR in standard MIL 39006 case sizes

NBJ/NBM Series



COTS+ Niobium Oxide Capacitor

NBJ and NBM are Weibull graded versions of NOJ OxiCap® and NOM Multianode Low ESR OxiCap®.

The series combines the benign failure mode of niobium oxide technology (resistive failure mode up to category voltage) with high reliability burn-in, making these series ideal for power filtering in mission – critical high speed digital systems.

NBJ & NBM series offer a non-burn solution for military and space applications. Niobium Oxide COTS+ Capacitors may be specified with failure rate grading to Weibull “B” or “C” and surge current tested in accordance with MIL-PRF-55365.

NBJ & NBM Niobium capacitors are available in the same case sizes as the standard tantalum surface mount capacitors and are available with compliant tin/lead terminations.

Applications:

- Aerospace
- Military
- Space
- Avionic: instrumentation/sensor requiring power filtering for high speed ASICs

Key Features/Benefits:

- Weibull grade reliability
- Ideal for 5V rail and lower filtering and power distribution in DCDC, AC-DC, digital and analog circuits

OxiCap® NOJ Series



Standard Niobium Oxide Capacitor

Cost versus performance is a key requirement for consumer electronic products. A new solid electrolyte capacitor OxiCap® has been developed by AVX in standard EIA case sizes in order to meet this requirement as a higher performance alternative to aluminum and other SMT capacitor technologies currently on the market.

The OxiCap® non-burn technology is based on NbO niobium oxide ceramic material as the anodic material processed through the same manufacturing process as tantalum capacitors. Nb₂O₅ dielectric in combination to self-healing MnO₂ cathode is a basis for a good reliability level 0.5%/1000 hrs. within a temperature range up to 105°C and rated voltage <6V (rail voltage <5V). Electrical parameters are similar to general tantalum specifications. NbO and MnO₂ are widely available materials. The laser coded orange molded body gives total traceability.

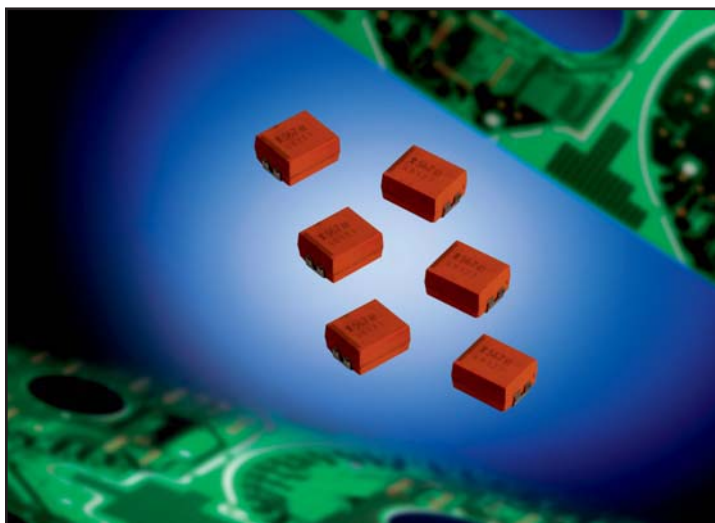
Applications:

- Notebooks
- Automotive
- Telecommunication
- Industrial

Key Features/Benefits:

- Reduced voltage derating
- Non-burn technology (i.e. failed OxiCap® will not burn up to category voltage)
- Stable supply chain
- Cost versus performance

NPV Series



CoreCap® – NbO/Ceramic Multianode Capacitor

The NPV series of CoreCap® capacitors offer super low ESR capacitance based on a combination of safe and stable OxiCap® anodes and MLCC anodes. The NPV series complies with RoHS requirements and it is an environmentally friendly component ready for lead-free assembly systems up to 3x reflow with 260°C peak temperature.

Applications:

- High power, low voltage applications
- Telecom/Networking
- Servers

Key Features/Benefits:

- Combination of high capacitance 560µF 2.5V and 3mW at 300kHz makes this part ideal for low voltage bulk filtering

LD Series



Tin / Lead Finish HiCV MLCC Range Extensions

AVX Corporation is pleased to announce that we will continue to support our customers with requirements for ceramic capacitors with termination consisting of 5% minimum lead. Available ceramic types include Ultra Low ESR “U Series”, NPO, X5R, X7R and X8R with voltage ranges from 6.3V to 5000V. In addition; our low inductance series of MLCC components can also be supplied, and the X7R range of ceramic capacitors with the award winning FLEXITERM® technology, is available with tin / lead finish.

Currently, we have expanded our offering on our LD Series to include 1210 6V X5R for 47 and 100 μ F CVs.

Please contact the factory if you require additional information on our MLCC Tin/Lead Termination products.

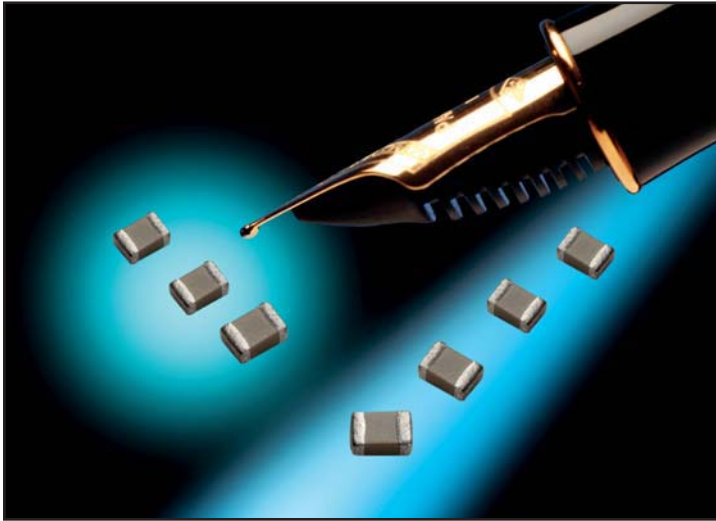
Applications:

- Coupling
- Decoupling
- Filtering & snubber circuits

Key Features/Benefits:

- Long term commitment to customers with a tin lead termination requirement

LT Series



Range Extensions for Low Profile X5R & X7R Dielectrics

AVX's continuous investment in research and development along with enhanced manufacturing techniques has allowed us to expand our Low Profile MLC Capacitors. These technological advancements in the X5R dielectrics have made available the following parts:

0201 0.1 μ F/4V X5R \pm 10 tolerance
Height 0.22mm Max

0805 2.2 μ F/16V X5R \pm 20% tolerance
Height .95mm Max

0402 2.2 μ F/4V X5R \pm 20% tolerance
Height .56mm Max

0805 1 μ F/25V X5R \pm 20% tolerance
Height .95mm Max

0402 1 μ F/10V X5R \pm 20% tolerance
Height .56mm Max

1206 4.7 μ F/25V X5R \pm 20% tolerance
Height .95mm Max

With continued enhancements we are able to expand our low profile offering in X7R with the following part number:

1206 0.47 μ F/25V X5R \pm 10% tolerance

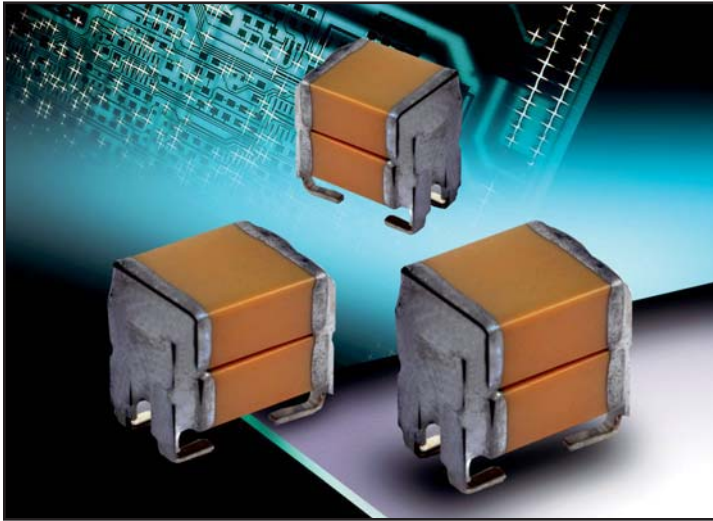
Applications:

- Modules, memory cards, ICs
- General decoupling and filtering where height clearance is limited

Key Features/Benefits:

- Highest cap values available
- Very low profile

RH Series



RoHS Complaint Capacitors for Switch Mode Power Supply

To address the growing need for RoHS compliant products, AVX has developed a new series of switch mode power supply capacitors that are designed to meet the rigors of the telecommunications markets, industrial controls and commercial applications. These capacitors can operate in extended temperature conditions from -55 to 125°C. The RH series is mounted on a lead frame which supplies superior reliability and allows the part to be placed into harsh mechanical and high flexure environments that would cause other standard capacitors to fail. These parts are available in RoHS compliant terminations.

Applications:

- Telecommunications power supplies
- DC/DC converters
- AC/DC converters
- Industrial controls
- Commercial power supplies

Key Features/Benefits:

- RoHS compliant
- Low ESR, low ESL
- High ripple capability
- Ideal capacitor for commercial power supply applications

MH Series



MH SMPS Capacitors

AVX has introduced an innovative approach to capacitor technology. The newly introduced MH series is a ceramic capacitor sealed inside a rugged tantalum body. This allows the designer to have the great, low ESR, low ESL, non polarization, high ripple ratings and still maintain the unbeatable mechanical performance of a tantalum body with the added benefit of being in a RoHS package. Tin/lead options are also available. Current values are up to 33 μ F.

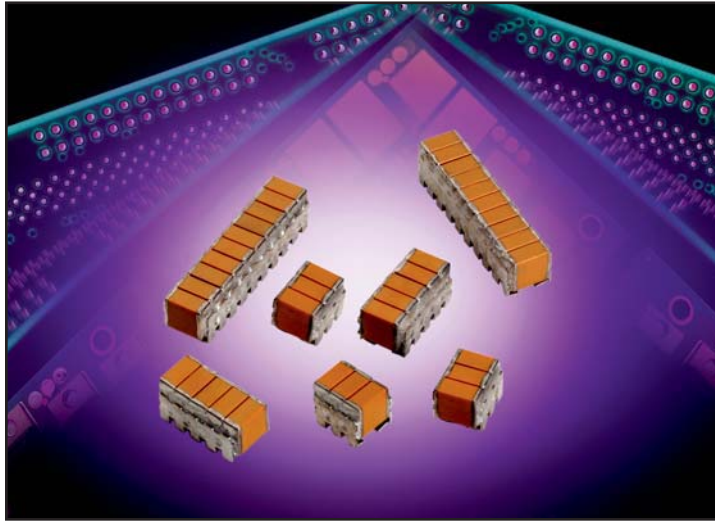
Applications:

- Industrial and commercial power supplies
- Telecommunications applications
- Smoothing applications
- DC/DC power supplies (including brick and smaller)

Key Features/Benefits:

- Small form factor
- Low ESR, low ESL
- Unbeatable mechanical reliability
- RoHS compliant
- Non-polar

Ultra Small HV Chips



High Voltage Ceramic Capacitors Turbo Cap

AVX has extended its extensive offering of award winning high voltage capacitors to include the 0805 case sizes. These capacitors are available in FLEXITERM®, tin, tin/lead, or even FLEXITERM® with tin lead. These ultra small capacitors exhibit the same low ESR, low ESL and high arcing thresholds as the standard capacitors. All of the AVX high voltage capacitors are 100% tested. Applications for these capacitors are medical (including implantable), industrial controls, lighting, ESD protection, surge protection, consumer controls and also higher reliability applications.

Applications:

- Communications lines
- Input/output lines
- Industrial power supplies
- Medical
- POE (power over Ethernet)
- Wireless
- DC/DC converters
- Lighting circuits
- LED circuits

Key Features/Benefits:

- Small form factor
- Low ESR
- 100% testing
- High arcing threshold
- Variety of terminations

SMX/CHX Series



Extreme High Temperature Capacitors for Switch Mode Power Supply

The development of electronics that require elevated operating temperatures is going to be a key technology to support the next generation of products. We are all aware of the growing requirements for electronics in automotive applications such as hybrid vehicles and the demand for more electronics that control and monitor every aspect of our vehicles. Consumers pressure the petroleum industry to provide the petrochemicals that make our lives comfortable. The petroleum industry has responded by searching out new pockets of reserves. There is an increased mandate to place these controls in harsh environments with temperatures surpassing 200°C. These devices are also subjected to extreme shock and vibration. These parts must supply high currents and also operate over a wide voltage range. AVX has developed a new line of switch mode power supply capacitors that address this need called the SMX line.

The SMX capacitors are rated for -55°C to 200°C and were designed to endure severe shock and vibration associated with harsh environment and mission critical applications. These capacitors exhibit extremely low ESR and ESL, which makes them ideal for high current, high power or be able to absorb extreme transients. Possibly one of the key features of this product is its intrinsic ability to retain capacitance over temperature and frequency, all combining to make this an ideal snubber, output/input filter, DC converter, decoupling and/or bypass capacitor.

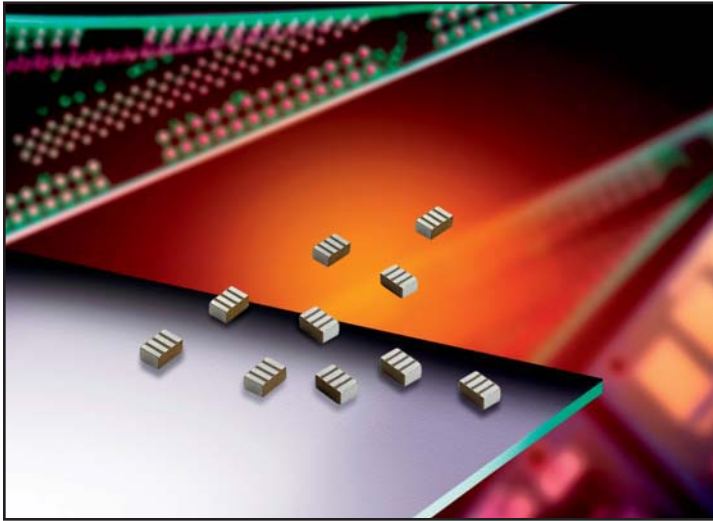
Applications:

- Downhole exploration
- Hybrid vehicles
- Aircraft engine controls
- Space and avionics
- High temperature environments

Key Features/Benefits:

- 200°C operating conditions
- High ripple capability
- Low ESR, low ESL

4T LGA Series



Land Grid Array Capacitors

Land Grid Array (LGA) capacitors are based on the first Low ESL MLCC technology created to specifically address the design needs of current day Power Delivery Networks (PDNs). This is the 3rd generation of low inductance capacitor technology developed by AVX.

Prior to LGA, an engineer was faced with a design tradeoff that tied low ESL performance with an unwanted drop in capacitance. LGA products break the traditional relationship between low ESL performance and low capacitance. With 4 terminal LGA products, a designer can have both low ESL performance and high capacitance.

Applications:

Semiconductor packages:

- Microprocessors
- Graphics processors
- ASICs
- FPGAs
- Application specific products

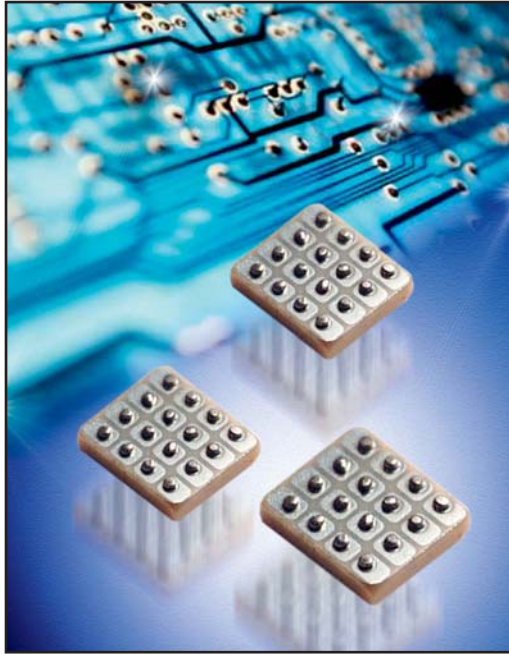
Board Level Decoupling:

- Operating frequencies > 300MHz
- ICs with power requirements > 15W
- Operating voltages < 3.3V

Key Features/Benefits:

- ESL performance of less than 20pH
- Lowest ESL MLCC capacitor available for high volume, cost sensitive applications
- First MLCC to provide both high performance low ESL characteristics and high capacitance
- Builds on the successful 2 terminal LGA product family

LICA Series



Low Inductance Capacitor Array

The Low Inductance Capacitor Array (LICA®) family has a reputation for providing the highest performing Low ESL decoupling capacitor in semiconductor packages built for enterprise class CPUs, hybrids, and ASICs for communications infrastructure, space, and military applications.

AVX is now offering its LICA® family with a standard Sn/Pb Eutectic solder ball – the “V” termination option compliments the high temperature C4 solder ball that was optimized for packaging and hybrid usage. Designers are using new lower temperature Sn/Pb solder ball versions of LICA® for board level decoupling of large pin count FPGAs and ASICs in high reliability applications.

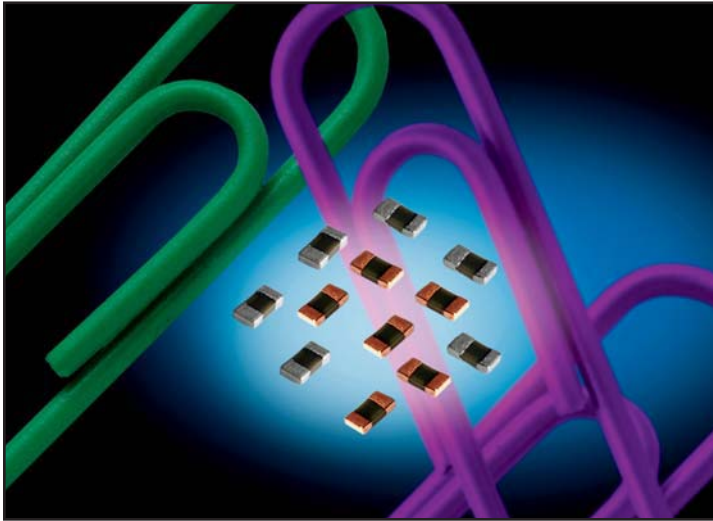
Applications:

- Application specific integrated circuit
- Microprocessor
- Graphics processor

Key Features/Benefits:

- High reliability
- High performance low ESL decoupling capacitor (ESL of 25pH)
- Very small form factor

UT Series



Ultra-Thin Capacitors

AVX continues to deliver innovative new products with the UT series of Ultra-thin capacitors. The first generation UT Series products have a maximum height of 0.25mm. AVX is the first company to offer a standard MLCC product family with a thickness of 0.25mm or less.

The UT Series utilizes AVX's multi-patented FCT manufacturing process to create the first standard MLCC capacitor family with flat terminations. These flat terminations are more resistant to tombstoning versus other standard MLCCs that have rounded terminations.

The UT Series is more than the thinnest MLCC product family, it is the first family of products designed to be embedded in either a substrate or PCB. The UT Series includes a copper termination option for embedding these thin capacitors in substrates and PCBs during the build up process.

Applications:

- PDAs
- GPS devices
- Cellular
- Notebook computers
- Mobile internet devices
- Flat panel displays

Key Features/Benefits:

- Thinnest standard MLCC product family
- Flat terminations to resist tombstoning
- Multiple termination options including copper for embedding and gold for wire bonding

9175/9176 Series



9175/9176 Development Kit (Reference #069176500001000)

AVX/Elco has released a development kit for their IDC wire to board product ranges in order to promote the use and increase design in of the product by design and development engineers.

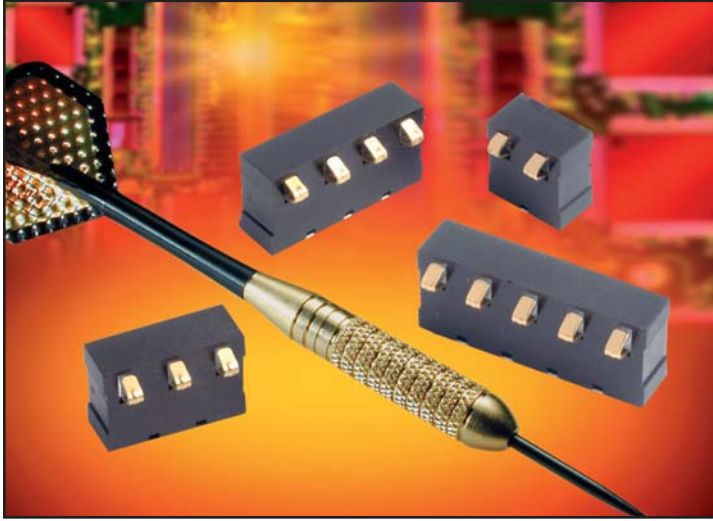
The kit comprises of:

- Universal handle
- Insertion tool bits for the use with 9175
- 9176 1.60mm diameter wire and 2.10mm diameter wire
- 9175/9176 connectors mounted on a small PCB for connection testing and termination practice
- A tape and reel section of the 9175/9176
- A wire for practice terminations can be found under the tray insert

The PCB mounted connectors give a good indication of the contacts soldered joint and stability of the connector while being terminated.

The box in a presentation case with identifying labeling for all the internal parts is provided and the PCB and wire can be replenished through catalog distribution.

9155 Series



AVX Expands the Battery Connector Range by Adding a 90° Version

A new addition to the existing battery offering from AVX/Elco is the 90° 9155 Series. The standard 3mm pitch is available as a 2 way to 5 way. This 9155 Series is a compact connector with a contact point of 4.61mm above the PCB. This series offers extra connector stability by having an extra contact fitted in between the contact. This additional contact spans the width of the connector giving extra SMT pads.

The 9155 series is rated at 3 amps per contact and 5000 mating cycles and is RoHS compliant. It utilizes high temperature plastics which enable the connectors to be processed at up to 260°C.

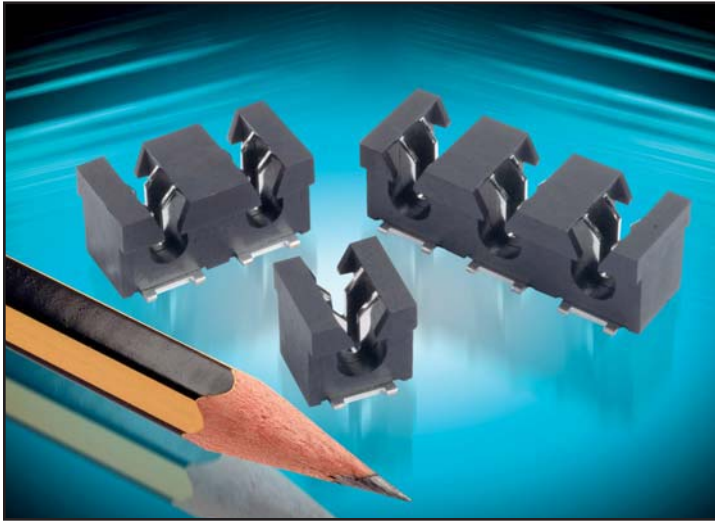
Applications:

- Mobile phones
- MP3 players
- Hand held and data terminals

Key Features/Benefits:

- Simple design spring compression contact
- End to end stackable
- Additional contact feet for greater SMT surface area
- As with all AVX/Elco spring contacts - robust to shock and vibration
- Pronounced contact point form selectively plated

9177 Series



The Latest Series Addition to the AVX/Elco Wire to Board Range

The new 9177 series of Wire to Board connectors from AVX/Elco further expand the range of the previously released series 9175 and 9176. AWGs of the individual wires that can be terminated by the 3 product series have increased. The 9177 series offers the added power and voltage rating of 15A and 650V.

Available as a 1, 2 and 3 way connector with a range of wire that can be terminated from 14 AWG to 20 AWG stranded wire.

Applications:

- Power cable terminations
- Voltage critical areas
- Individual high power terminations

Key Features/Benefits:

- End to end stackable for larger pin counts
- Eliminates hard soldering
- IDC fit and forget terminations
- Cost effective termination of individual wires
- Simple assembly tooling

5138 Series



Low Profile MicroSD Connector Just 1.6mm High

Compliant with the MicroSD standards specified by the SD Card Association, the AVX series 5138 MicroSD card connector has one of the industry's lowest profiles at 1.6mm high. The SD Card Association is an industry-wide organization charged with setting industry standards for the SD Memory Card. Typical applications are in portable equipment and mobile phones.

The 8-position connector is pitch compliant with MicroSD standards and its spring-eject mechanism is a push/push type for secure card operation. The user-friendly product also offers an audible clicking response when the card is inserted or ejected. Connector dimensions including tails are 14.3mm (W) x 16.5mm (L) x 1.6mm (H).

Applications:

- Cell phones
- PDA devices
- Media players

Key Features/Benefits:

- Guaranteed 10,000 mating cycles
- Integral card detection switch to detect presence of card
- Locking mechanism locks the card securely preventing it from falling out
- Outer lead frame that is easily reworked when mounted
- Environmentally friendly lead-free version
- Withstanding voltage of AC 500 Vrms/min

5802 Series



0.4mm Pitch Super Slim Board to Board Connector

Series 5802 is the new range of board to board connectors with one of the lowest stacking profiles in the industry today along with a super slim body width of 3.2mm (including tails).

Combined with the small footprint is the innovative feature that no part of the pins are exposed on the base of the connector allowing patterns to be put down between the rows of pins beneath the connector.

Developed for high density packing, the 5802 series is perfect for the current market requirement to downsize components in products such as the latest cell phones and digital media players.

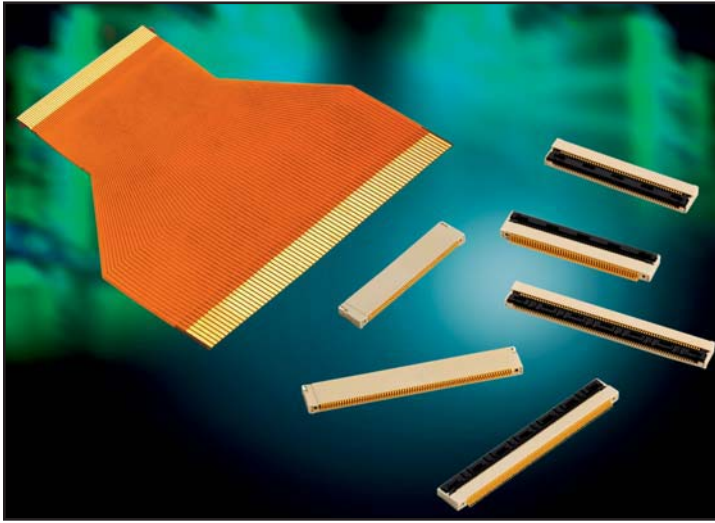
Applications:

- Cellular phones
- MP3 players
- MP4 players

Key Features/Benefits:

- Space-efficient with 0.8mm stacking height and 3.2mm width
- Unexposed pins on the base allowing for tracks to be put down beneath the connector
- Fine locking system when mating gives tactile and audible “CLICK” and allows high un-mating force despite ultra low profile
- Twin rib contact system self-cleans contact and gives good durability against vibration and drop shock

6275 Series



0.5mm Pitch Secure Lock FFC/FPC Connector

As fast as levels of complexity in electronics are being driven up, the size of electronic components are heading in the opposite direction. Connector pitches of 0.5mm and below are now the norm, and reliability in critical applications can sometimes be an issue.

The new 6275 Secure Lock ZIF addresses concerns of reliability, particularly in automotive and medical applications. The connectors are moulded to allow specially adapted FPC cables, giving advantages over standard FPC connectors. The moulding allows for a true fit and once the FFC or FPC is locked in place it is almost impossible to remove by accident.

Connectors available in 40 and 50 pins variants with more positions planned.

Applications:

- Automotive: satellite navigation, radio, DVD
- Medical: blood sugar monitors, LCD screens
- Industrial automation
- Payment terminals

Key Benefits:

- Industry standard 0.5mm pitch.
- Shaped FFC/FPC allows for much better mechanical connection and performs better under harsher conditions
- One touch “CLICK” locking provides tactile and audible feedback that the connector is closed correctly
- Metal retention tabs to provide mechanical strength on the PCB

Pb-Free & RoHS Compliant Products



Pb-Free & RoHS Compliant Products

As the world is turning toward green products, new AVX products and older products are being designed to meet or exceed worldwide trends to eliminate certain materials, such as lead.

Since the last update, most AVX product lines have converted to full RoHS compliance. Parallel to the effort, AVX continues to support our customers by maintaining lead-based systems to meet their specific requirements. Work is underway to qualify products which will no longer require the use of an exemption in order to meet RoHS. This is particularly important for serving the Chinese market which does not have provisions for exemptions recognized by the European Union.


AVX has revised the RoHS website to include the status of products in regard to EU RoHS as well as China and Korea requirements.

Visit: www.avx.com/rohs_leadfree.asp

Key Features/Benefits:

This website section contains information on RoHS compliance for AVX products, legislative requirements, product family status and recommended soldering profiles.

Quick Connect



FFC, BATTERY, SIM, WIRE TO BOARD AND I/O CONNECTORS

AVX "quick connect" is a fast turnaround sample program, covering FFC, Battery, SIM and Input/Output connectors. Design Engineers can speed their development cycle by selecting up to 10 samples of an item from our list of over 200 key part numbers. We will dispatch these parts within 48 hours.

BATTERY OVERVIEW

We offer a range of battery connectors in standard format, reduced PCB size and low profile height for use in the latest battery backed equipment. In addition to our standard range, various custom options are available including solderless connectors.

Comments	Pitch	Contact Matrix height mm (in)	Positions	Part Number	Samples
Standard	2.5mm	3,353 (2.01, 2.00, 1.228)	3,4,5	00915500001016	Request Sample
				00915500001016	Request Sample
	2.5mm	3,804 (2.1, 1.690, 1.772)	3,4,5	00915500002016	Request Sample
				00915500002016	Request Sample
	2.5mm	4,305 (2.1, 1.690, 1.969)	3,4,5	00915500003016	Request Sample
				00915500003016	Request Sample
Reduced Size	2.5mm	2,201 (2.40, 0.098, 1.338)	2,3,4,5	00915500000016	Request Sample
				00915500000016	Request Sample
	2.5mm	2,201 (2.40, 0.098, 1.338)	2,3,4,5	00915500001008	Request Sample
				00915500001008	Request Sample
Ultra Low Profile	2.5mm	1,301 (0.261) Max		00915500001006	Request Sample
				00915500001006	Request Sample

SIM CARD CONNECTORS OVERVIEW

Standard blocks in various heights and skid-in versions with standard and narrow footprints accommodate SIM cards in handheld/portable equipment designs.

Comments	Positions	Stack height mm (in)	Part Number	Samples		
Standard	6	0.20 (0.039)	00916200000000	Request Sample		
SLIDE-IN SIM						
Comments	Positions	Stack height mm (in)	Part Number	Samples		
Standard	6	1.75 (0.069)	00916200001016	Request Sample		
Narrow Footprint	6	1.75 (0.069)	00916200001016	Request Sample		
PUSH-PUSH SIM						
Comments	Positions	Stack height mm (in)	Pitch	Height	Part Number	Samples
6 pin pushout	6	1.27 (0.050)	2.54 (0.100)	04 4008-008 210 8624	00916200001016	Request Sample
8 pin pushout = Skid Lock	6	1.27 (0.050)	2.54 (0.100)	02 5008-008 202 8624	00916200001016	Request Sample
8 pin pushout	8	1.27 (0.050)	2.54 (0.100)	04 4008-008 210 8624	00916200001016	Request Sample

Faster Sampling with AVX Quick Connect

www.avx.com/QCRequest.asp

AVX Quick Connect is a fast turnaround sample program, covering FFC, Battery, SIM, Input/output and IDC Wire-to-Board connectors.

Design Engineers can speed their development cycle by selecting samples from over 200 of the company's industry leading FFC connectors and 50 other connectors. Samples are then sent within 48 hours of request.

The off-shelf service includes over 10 of the most popular AVX FFC connector families with typical options from 3 to 30 positions. The extensive list of parts available includes 0.5 and 1.0mm pitch FFC connectors in right angle and straight formats, battery, SIM, I/O and low pin count wire-to-board connectors.

All items are RoHS compliant.

Key Features/Benefits:

- Access to over 200 of the most popular connector products in the AVX portfolio
- All available pin positions available for FFC connectors
- Despatched within 48 hours of request



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