



ECOMAL[®]

Electronic Components and Logistics

ECOMAL Europe GmbH
Examples of components in the
area of AMS applications

WET Tantalum capacitors

- Capacitance values up to 72,000 μF
- Rated Voltage up to 125 V
- Up to 41J of energy storage in a single device!
- Highest Energy Density available ($> 2 \text{ J/cc}$)
- **Military MIL-PRF-39006/.... qualified versions**
- Custom solutions: Can be supplied in an array of series and parallel connections to achieve even higher Cap and Voltage

vPolyTan™ Polymer Capacitors

- AEC-Q200 Compliant types
 - Qualified up to 125°C
- IATF 16949 Factory Certification
- High Humidity Performance Types
 - Certified to 85°C/85% RH at Rated Voltage for 1000hrs
- 100% surge tested for safety
- **Stacked version 30-2800 μF ; 16-75 V**
- Mechanically robust design for high-shock environment
- Low ESR for reduced parasitic losses
- Low DC Current Leakage for wireless applications
- Compatible Types with Sfernice's MEPIC Pyrotechnic Initiator Chip Resistor

Wirewound Resistors

Molded construction

- Molded construction for total environmental protection
- Complete welded construction
- Qualified to MIL-PRF-18546
- Available in non-inductive styles (type N) with Ayerton-Perry winding for lowest reactive components
- Mounts on chassis to utilize heat-sink effect

Wirewound

- Precision Power
- Low Value
- Military MIL-PRF-49465 Qualified

Network

- Thick Film Resistor Networks
- Military, MIL-PRF-83401 Qualified
- Isolated, bussed and dual terminator schematics available

Solid MNO2 Tantalum Capacitors

- Hermetically sealed, Metal cased
- Wide range of Weibull failure rate classes
- **Military MIL-PRF-39003/.... qualified versions**
- AEC-Q200 qualified versions
- Hi Rel versions
- Built-in fuse versions
- Extended value ranges available

Massive Electro-Pyrotechnic Initiator Chip Resistor

- Surface mount design for standard assembly process
- Active area designed upon performances
- Case size 0805
- Firing energy down to 1.0 mJ
- Firing time down to 250 μs
- Ohmic value: 2Ω to $8 \Omega \pm 10 \%$ (typical)
- Joule effect ignition
- Easy set up by design of firing levels
- Compatibility with pyrotechnic element has to be tested in real environment

Surface Mount Multilayer Ceramic Chip Capacitors MIL Qualified

- Military qualified products **CDR**
- High reliability tested per MIL-PRF-55681
- Federal stock control number, CAGE CODE 2770A
- Tin / lead termination versions
- Lead (Pb)-free termination versions
- Wet build process
- Reliable Noble Metal Electrode (NME) system

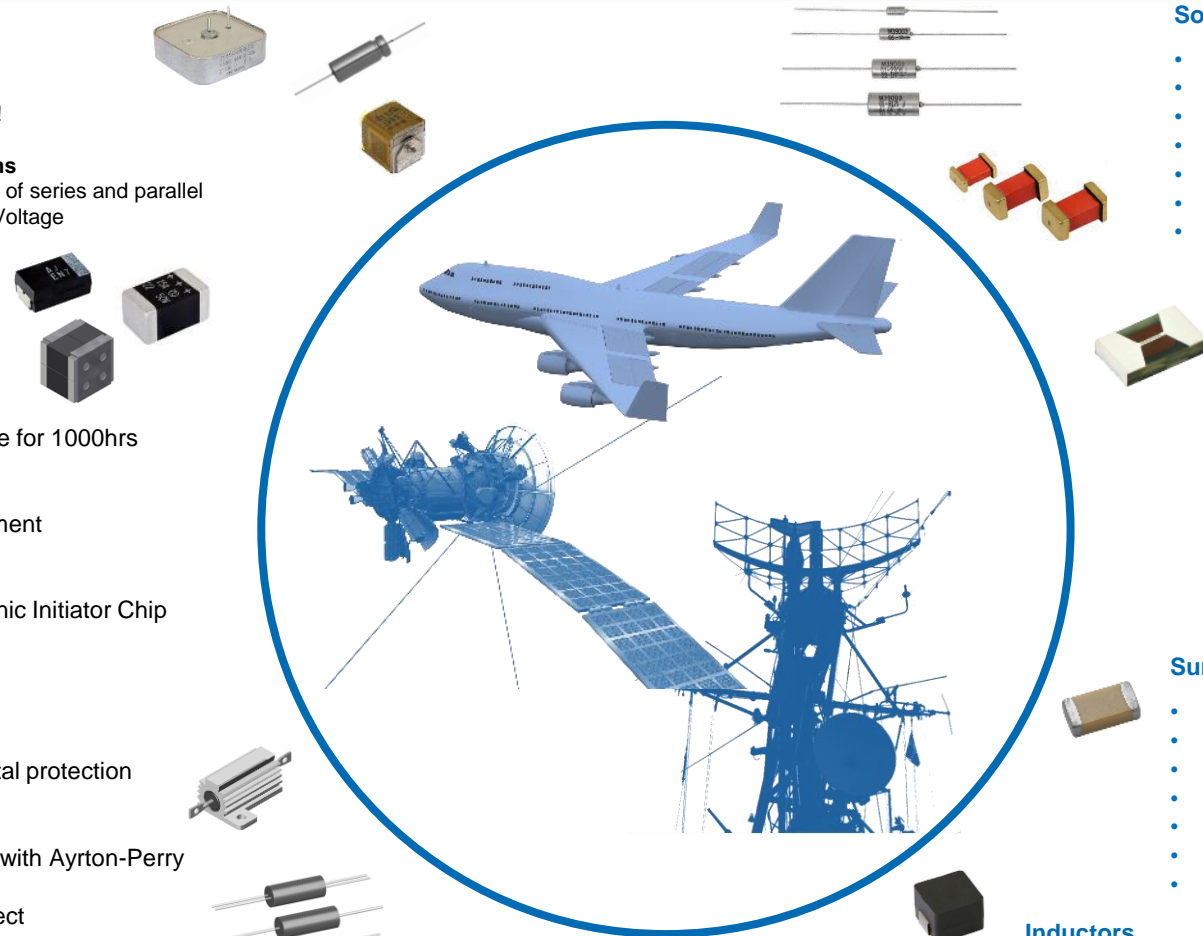
Inductors

- MIL-STD-981 class S compliant (see "Screening Codes")
- High temperature rating, up to 180 °C
- Shielded construction
- Lowest DCR/ μH , in this package size
- Handles high transient current spikes without saturation
- Low profile package with high current saturation levels
- Reliable Noble Metal Electrode (NME) system

Do not hesitate to contact us

ECOMAL Europe GmbH

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Solid MNO2 Tantalum Capacitors



Leaded

AXIAL LEADED METAL CASE
 M39003/01 CSR13 STANDARD VALUE
 M39003/03 CSR23 EXT VALUE
 M39003/09 CSR23 LOW ESR

CECC-30201-001; 029 749DX
 CECC-30201-002; 005 CTS1/CTS13

SMD

MIL-PRF-55365/4 CWR06 STANDARD VAL
 MIL-PRF-55365/13 CWR16 EXT. VALUE
 MIL-PRF-55365/13 CWR26 LOW ESR
 MIL-PRF-55365/8 CWR11 STANDARD VALUE MOLDED



Surface Mount Multilayer Ceramic Chip Capacitors MIL Qualified

QUALIFIED CDR-MIL -PRF-55681 and MIL-PRF-123
 DLA drawing:
 DSCC 03029
 DSCC 03028
 DSCC 05006
 DSCC 05007
 DSCC 05001
 DSCC 05002
 DSCC 05003



WET Tantalum capacitors

M39006/22 CLR 79
 M39006/25 CLR 81
 M39006/30 CLR 90
 M39006/31 CLR 91
 M39006/33 CLR 93

CECC 30202-
 001;008 735D/735DE/CTC79
 HOLD CLR65 and CLR69 – 138D



Do not hesitate to contact us
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Inductors

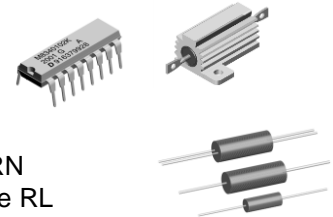
SGIHLP SPACE GRADE MIL-STD—981 COMPLIANTS



Resistors

Film Technology

- MIL-R-10509 Leaded Metal Film Resistor, type RN
- MIL-PRF-22684 Leaded Metal Film Resistor, type RL
- MIL-PRF-32159 Thick Film Chip Jumper, E-Rel type RCZ
- MIL-PRF-39017 Leaded Metal Film Resistor, E-Rel type RLR
- MIL-PRF-55182 Leaded Metal Film Resistor, E-Rel type RNC / RNR / RNN
- MIL-PRF-55342 Thick Film / Thin Film Chip Resistor, E-Rel type RM



Wirewound Technology

- MIL-PRF-26 Leaded Wirewound Resistor, type RW
- MIL-PRF-18546 Housed Wirewound Resistor, type RE
- MIL-PRF-39007 Leaded Wirewound Resistor, E-Rel type RWR
- MIL-PRF-39009 Housed Wirewound Resistor, E-Rel type RER
- MIL-PRF-49465 Leaded Metal Element Resistor, type RLV

Networks

MIL-PRF-83401 Thick Film / Thin Film Resistor Network, type RZ

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Bringing Power into engineered power component solutions

*The major component
in your success!*