

Speciality Passives

- **High Temperature Families**
- **High Voltage capacitors**
- Safety & Surge protection capacitors
- **High Energy & Modules**
- **MLCC's & FlexiCap[™]**
- **High CV capacitors**
- **EMI** Filters





Long time partnership

The long time relationship between wts//electronic und Syfer Technology Ltd. as well as Novacap for more than 10 years guarantees you :

High reliability products from a world leading manufacturers in coporation with the technical and logistic competence from wts//electronic.

Capacitors &





High Temperature Families

MLCCS

- 0.3pF to >5000µF
- 16V to 20kV
- 0402 to 7565 size
- SMT& leaded devices
- Safety certified capacitors
- FlexiCapTM terminations
- Cog, BX & X7R dielectrics
- High reliability military & medical
- Custom designs, assemblies & applications

30 Capacitance Change (%) 20 10 0 -10 -20 -30 "H" D,F -40 E,G material -50 S -60 -70 -55 -25 0 25 50 75 100 125 150 175 200 250 Degrees(C)

Filters

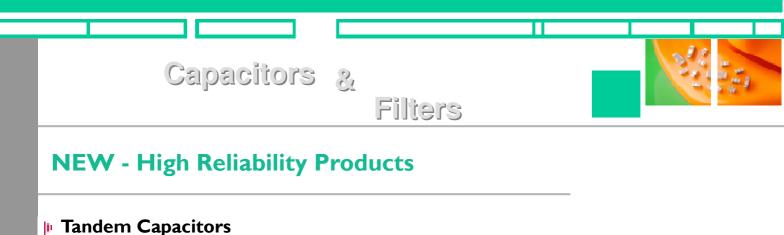
Broadest range of high temperature offerings

In the the term of ter

Dielectric Material	T Max /⁰C	тсс	Capacitance Range
н	250	+15/-25%	100pF-6.8µF
R	200	-2200ppm/ºC	1pF-1µF
E	200	+15/-65%	100pF-18µF
D	200	+/-30ppm/ºC	0.5pF-0.39µF
G	160	+15/-50%	100pF–18µF
F	160	+/-30ppm/ºC	0.5pF–0.39µF
S	150	+/-15%	100pF–15µF

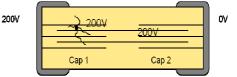
H material under development





Tandem cap incorporating **FlexiCap™** terminations are designed to be used in applications where previously two capacitors placed in series were specified in case of short circuit failure e.g. automotive etc.

- Capacitor 1 Working Voltage 200V,
- Capacitor 2 Working Voltage 200V



If Capacitor 1 has experienced a short circuit failure then Capacitor 2 is capable of withstanding the resulting doubling in Voltage.

Open Mode

Syfer's open mode capacitors use a **FlexiCap™** termination plus an inset electrode design which prevents any mechanical crack from crossing the active area of the capacitor, therefore preventing a short circuit failure.

- important Notes
 - Open mode capacitors will only fail as open circuit (or low capacitance) if the failure is due to mechanical cracking. Any other cause of capacitor failure will almost certainly result in short circuit.

Mechanical Crack

• Open mode capacitors will minimise but cannot completely eliminate this risk.

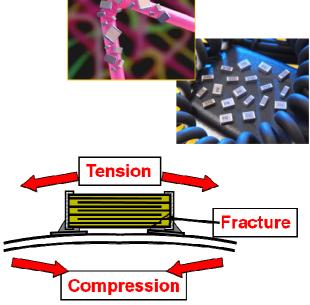
MLCC'S & FlexiCap[™]

MLCC product range

- -to 82µF
- -to 10kV
- -Safety certified capacitors
- -Space approved capacitors
- -IECQ/CECC & AECQ200 Rev. C

Image: FlexiCap™

- -The original polymer termination
- -Virtually eliminates flex-cracking
- -70 to 220% bend test improvement
- -Engineers love the product



Active area



Filters



High Voltage capacitors

- up to 20kVdc
- 0402 to 7565 size
- COG and X7R dielectrics
- Safety certified chips
- FlexiCapTM terminations
- Y5V, Z5U and BX compositions
- High CV parts
- Series of specialized High Temperature materials



EMI Filters

In Surface mount C & Pi filters

- Higher C values & working voltage than competition
- Favored by military / aerospace

▶ X2Y filters – 3 capacitors in an integrated package

- Balanced design
- Common and differential mode filter

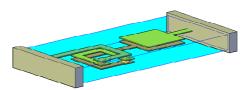
▶ Panel mounted & feedthrough filters

- Best high f performance
- C, L-C, T & Pi designs available

NEW

- LTCC filter
- 400MHz to 4 GHZ
- Hermetic EMI filter
 C, L-C, C-L, Pi & WE772
- AC/DC class X/Y power filters

 10 to 100A





We look forward hearing from you!

Contact

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