

# NEW SPACE QUALIFICATIONS



## NEW RANGES OF CERAMIC CHIPS CAPACITORS QUALIFIED FOR SPACE USE PROPOSED BY EXXELIA TECHNOLOGIES



### INTRODUCTION IN QPL OF THE CERAMIC CHIPS CAPACITORS PROPOSED BY EXXELIA TECHNOLOGIES:

- Sizes **0603** to **2220**
- **16V** to **100V**
- 3 variants available:
  - Ag/Pd/Pt termination
  - Nickel barrier + Tin/lead [ESA qualified]
  - Nickel barrier + Gold

➔ **EXXELIA TECHNOLOGIES is the only manufacturer to be qualified for the size 0603 and for the 16V**

### QUALIFICATION OF THE POLYMER TERMINATION FOR CHIPS CAPACITORS

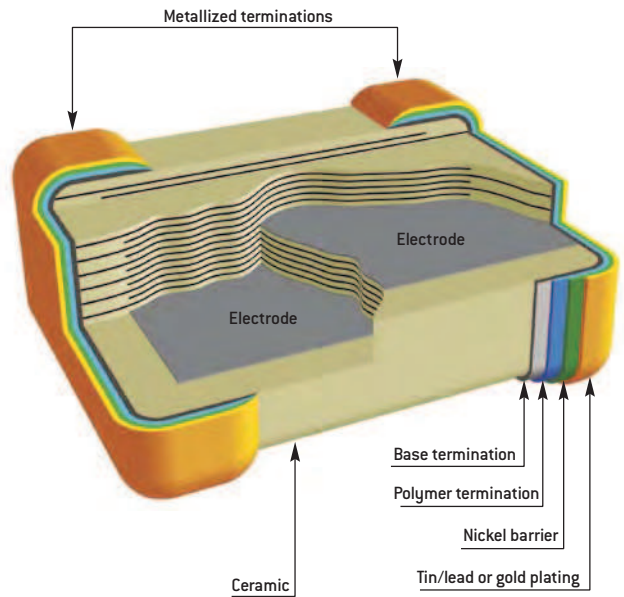
The polymer termination is an additional flexible layer between the connecting layer (metallization) and the nickel barrier.

This polymer layer absorbs the thermomechanical stresses in order to avoid the cracks of capacitors.

**Qualified for Space (QPL)** for X7R chips capacitors, from size 0603 to 2220. from 16 V to 100 V  
**ESCC 3009/039** and **ESCC 3009/040**

➔ Extension of the achievable capacitance values:

<b>Examples:</b>	0603	100 nF	16 V
	1206	1 $\mu$ F	16 V



➔ **EXXELIA TECHNOLOGIES is the only manufacturer to be qualified for the polymer termination**

### RANGES UNDER EVALUATION

Two new ranges of products are under evaluation for space use:

- ➔ 0402 range, from 10 V to 25 V
- ➔ 10 V range, from size 0402 to 1210

<b>Examples:</b>	0402	10 V	12 nF	{X7R}
	0603	10 V	120 nF	{X7R}
	1206	10 V	1.5 $\mu$ F	{X7R}

