

### BASIC OVERVIEW

AVX offers a broad range of conductive polymer solid electrolytic capacitors. AVX is first to market several new polymer technologies such as the highest voltage in the industry, over 100V (*Elektra award winning*), all industry standard case sizes from 1005 metric / 0402 EIA to 7361 metric, the highest performance polymers in hermetically sealed packages with 10,000 hrs lifetime (*Elektra award winning*), and highest energy density Joules / cc.

### TECHNICAL INFORMATION

#### Polymer Capacitors Fall Into the Following Categories:

##### Sub-A Case (3216 Metric / 1206 EIA) Sizes:



- As small as 1005 metric (0402 EIA)
- Many MLCC replacement opportunities (e.g. audio circuits)
- F38 and TCN Series
- Low Profile (down to 0.6mm max height)

##### High Energy:



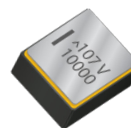
- Highest Joule/cc, up to 46.6mJoules
- Low profile case sizes (down to 1.2mm height)
- Max Capacitance / large outline (1500uF / 7361 metric)
- J-CAP™ Series

##### General Purpose:



- CV range: 0.47-470µF / 2.5-125V
- 18 case sizes available
- Ultra low ESR multianode design
- TCJ / TCM series

##### Space:



- Designed for ESA - Highest reliability polymer
- Hermetically sealed package with >10,000 hrs lifetime
- TCH series

##### Automotive:



- Full voltage range: 4-50V
- Humidity 85°C / 85%RH, Vr, 1000 hours (AEC-Q200)
- TCQ series

##### High Reliability:



- Robust design for long operation lifetime
- MIL Surge testing option
- TCB and TCS multianode series

### KEY FEATURES / BENEFITS

- Benign Failure Mode Under Recommended Use Conditions
- Lower ESR than Traditional Tantalum
- 3x Reflow 260°C Compatible
- CV Range: 0.47-470µF / 2.5-125V
- 18 Case Sizes Available

### APPLICATIONS

- AC/DC Power Supplies
- DC/DC Convertors
- Filtering
- Power Supplies
- Decoupling
- Bulk Energy Storage
- Timing Circuits
- Pulsing Circuits



### COMPETITORS / AVX ADVANTAGES

#### Advantages

AVX offers the highest voltage polymer capacitors (up to 125V), has the smallest case size (0402), and has a unique hermetically sealed package polymer (10,000 hrs life) for space applications.

- Large Portfolio, Offering Solutions for Most Applications
- Highest Voltage
- Lowest Lead Time
- Extensive Small Case Size Portfolio for MLCC Replacement

#### Specific Series Crossover

AVX Series	Competitor	Competitor Series
TCJ/TCM	Kemet	T520/T521/T530
TCJ/TCM	Panasonic	POSCAP
TCB/TCS	Kemet	T540/T541/T543

Have a question?

**CONTACT:** Your Local Representative

Visit Our Website:  
[WWW.AVX.COM](http://WWW.AVX.COM)

