AVX Tantalum Division

Surface Mount Military/Aerospace Products

HIGH RELIABILITY TANTALUM CHIP PRODUCT FAMILY - DESIGN GUIDE

TAZ Series Case Size R В C D G

TBC Series Case Sizes L R A

TCP Module

TAZ FAMILY SIZES: CWR09, CWR19, CWR29 and TCP Modules

The TAZ family boasts the widest range of case sizes and fullest range of MIL-QPL qualifications of any tantalum chip family, making it the ideal choice for the MIL-Aerospace designer.

This family represents the most flexible of surface mount form factors. The case sizes originate from the original MIL chip sizes, enabling support for all legacy programs, but have been extended to include both smaller and larger case size options. There are ten case sizes covering the full Capacitance/Voltage range. Parts are suited to hybrid or PCB assembly, with case sizes A to E designed as low profile (.050" nom).

The Low ESR versions of the larger case sizes are ideally suited to power applications, and the H case is also footprint compatible with TBJ D / E case sizes.

This family is also the ideal replacement for conformal coated CWR06 styles in mechanically demanding applications.

TBJ FAMILY SIZES: DSCC 95158, 07016 & CWR11; TBM Ultra-Low ESR.

The TBJ family is based on EIA / Industrial standard sizes. While this series offers a more limited range of form factors (only 4 QPL case sizes, A through D, with an additional 2 case sizes (E & V) available to DSCC drawing), it does enable commercial designs / prototypes to be upgraded from commercial to COTS-Plus or even SRC9000 Space level for flight applications.

TBC FAMILY SIZES: CWR15

TBC represents the world's smallest military approved tantalum chip capacitors technology. The case sizes are based on existing small case ceramic chip / resistor chip sizes; L, R & A case are equivalent to 0603, 0805 & 1206 sizes respectively, but with capacitance/voltage combinations significantly higher than available in 125°C rated ceramic devices. TBC represents a significant enabling technology downsizing and reduced payload circuits for military and aerospace PCB, hybrid & flex circuit applications.

THH 230°C HERMETIC SERIES

Tantalum capacitor in SMD hermetic package for industrial applications like downhole drilling, avionics and other high temperature, harsh environment application. Operational conditions 230°C/0.5xUr/1000 hrs or 200°C/0.5xUr/10000 hrs. Capacitance range 3.3-330µF, voltage range 16-63V in two case sizes, available with three optional termination designs. Manufactured using AVX patented Q process. Applying for DSCC approval.

TCH LOW ESR HERMETIC SERIES

Conductive Polymer in SMD hermetic package for aerospace, HighRel and other industrial applications.10000hrs endurance at 85°C, 2000 hrs at 125°C. Capacitance range 15 - 680µF, voltage range 10-100V in two case sizes, available with three optional termination designs. Manufactured using AVX patented Q-process. Elektra award winner 2015 (product of the year). Applying for ESCC and DSCC approvals



