SMD Tantalum capacitors operate in harsh environments

ECN Europe

AVX Corporation [1] has extended its TRM and TRJ 'Professional' series of SMD tantalum capacitors. Devices are aimed at high-end commercial applications with an extended product life, such as automotive devices, avionics and industrial equipment. Tantalum capacitors are the preferred solution for devices with a long operational life, because of their stable parameters, resistance to harsh environments and excellent reliability. AVX's TRM and TRJ Professional series offer enhanced electrical performance and class-leading reliability – more than double that of standard SMD tantalum capacitors.

Professional series TRM and TRJ tantalum capacitors feature low and ultra-low ESR and reduce DCL by 25%. Its robust design is capable of withstanding high thermo-mechanical stresses and operating in harsh environments. Once incorporated into devices, they boast high reliability levels, with failure rates of better than 0.5%/1000 hours at 85ºC and full rated voltage.

[2] *Picture: AVX*

Technical specifications for the TRJ Professional include: voltage range of 6.3V to 50V, with DCL leakage of 0.0075CV. TRJ Professional capacitors are twice as reliable as commercial grade tantalum capacitor products, with mean time between failures (MTBF) of 200,000 hours. They are designed and tested to withstand high current surges and are qualified to AECQ-200 automotive requirements.

The TRM Professional is a multianode type tantalum capacitor with a voltage range of 6.3V to 50V. Devices offer very low ESR and DCL leakage of 0.0075CV. Reliability

is double that of the standard TPM multianode product range at 0.5%/1khrs and MTBF is 200,000 hours. AQL level is 0.10% for the TRM Professional against 0.25% for standard product. TRM Professional multianode tantalum capacitors are qualified to AECQ-200.

SOURCE [3]

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