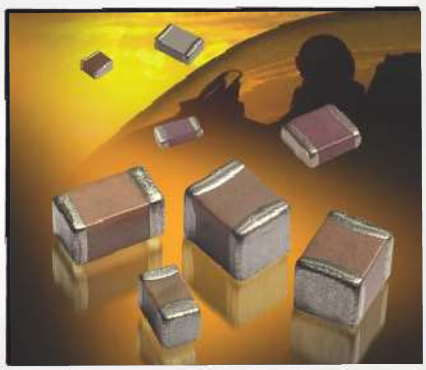
> Suncon's EP-Cap polymer aluminium electrolytic capacitor performs reliably up to 135°C

HIGH-REL SUPPLIER IS FIGHTING FIT

New people, new franchises and new products added in 2012 mean DMTL is better placed than ever to help companies specify high-rel and military passive products

In its role as a specialist passive components design-in distributor, DMTL has created a team capable of helping customers develop passive component solutions for a variety of applications. Solutions are based on a wide portfolio of components including capacitors, circuit protection devices, frequency control components, resistors and specialist connectors as well as ceramic devices and sensors. Applications include aerospace, automotive and military systems as well as some high performance industrial product sectors.



Aerospace, automotive and military system designers never compromise on their choice of components

Commercial director at DMTL, Pete Jones, said: "Designers of electronics-based systems for these applications never compromise on their choice of components. Component manufacturers and suppliers must meet an array of quality, reliability and performance standards which ensure that each and every part will function correctly in the harsh electrical and mechanical environments often encountered in high-reliability and military applications. And that's why designers turn to specialist distributors like DMTL for help."

Much of DMTL's high-rel and military capability is based around technology and products from AVX, a passive components manufacturer and a franchised supplier to DMTL for almost 20 years. Today, DMTL is an AVX high reliability and MIL-spec component design-in distributor for the UK.

Franchise additions

In 2012, DMTL added to this high-rel offering with its appointment as a franchised distributor for Suncon, the capacitor manufacturer behind a family of electrolytic capacitors designed to maintain performance and reliability levels at temperatures up to 135°C. Suncon's aluminium electrolytic capacitors are claimed to be among the lowest-profile aluminium electrolytics available today and are ideal for the automotive industry as well as those applications where resistance to vibration, long life and high reliability are crucial. Suncon brings a long history in capacitor design and manufacture and will be known to many as the company behind Sanyo's capacitor portfolio.

Specifically, DMTL will now offer Suncon's EP-Cap, a polymer aluminium electrolytic capacitor with a hybrid cathode formed by combining an electrolyte and electro-conductive polymer with high conductivity. Rated up to 125V, performance and reliability levels are maintained at temperatures up to 135°C.

The capacitors are said to offer a low ESR at high frequencies compared with conventional electrolytics, while the structure of the hybrid cathode electrolyte allows EP-cap devices to self-heal like traditional aluminium electrolytics.

EP-Cap devices are stable when exposed to temperature fluctuations and the range includes models with operating temperatures from -55 to 135°C and load life ratings to 10,000 hours. Voltage options are from 6.3 to 125V DC with capacitance values from 10 to 1,000µF. Dimensions range from 6.3mm by 7.7mm to 10mm by 12.5mm.

Portfolio expansion

In other new introductions, DMTL offers the AVX CDR 01/06 series, MIL-PRF-55681, surface mount ceramic capacitors. These high reliability, high frequency devices are available in both BP and BX voltage temperature options, which takes the operating range up to -55°C to 125°C. They are produced in 50 and 100V versions and across the series offer capacitance values from 10pF to 470,000pF with capacitance tolerances of ± five, 10 and 20 per cent depending on the chosen capacitance and voltage combination.

Failure rates are between S (0.001) and M (1.0) per cent and a variety of termination finishes are available including palladium silver, silver nickel gold and solder coated.

DMTL is currently helping a number of manufacturers of military, aerospace and automotive products with a myriad of designs. Many of these manufacturers target communications and control systems, power supplies and medical systems, where the same high performance and reliability issues are paramount.

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