



State of the Art, Inc.

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Technology Road Map

State of the Art, Inc. (est. 1969) manufactures high reliability surface mount resistor products for the global market using thick and thin film technology. QPL listed MIL-PRF-55342, MIL-PRF-32159, and MIL-PRF-914 surface mount resistor products comprise an important portion of our business. We also supply product to many demanding source control drawings used for aerospace, military, and implantable biomedical applications. We supply resistors for hybrid applications including product compliant to MIL-PRF-38534. We also supply surface mount resistors for high power and high frequency applications (loads, terminations, and attenuators). Our business is high reliability resistor products. We are ISO9001 and AS9100 certified. State of the Art, Inc. will not employ new materials or processes that have not been vetted by a qualification process. We do not want to jeopardize the quality or performance of our QPL military specification products.

State of the Art, Inc.'s technology road map centers on thick film and thin film technologies. Thick film resistors are made by screen printing thick film pastes onto 96% alumina substrates. The deposited films are dried then fired at temperatures ranging from 600-1000 °C. Our thick film materials are sourced from established suppliers. Thin film devices are used in precision applications that require tight tolerance and temperature coefficient of resistance performance. Our thin film resistors are made by sputtering materials onto alumina or silicon substrates. Thin film resistors are patterned using photolithography processes. Electroplating is often used to provide the desired termination finish for attachment to the circuit board. New product efforts center on using these core technologies to construct devices for new applications.