

LEADLESS SMT PACKAGES FOR OPTOELECTRONICS

Remtec's Leadless Ceramic SMT Packages Address the Long-Standing Demands of a Photonics Industry for a Viable Alternative to Standard TO-Style Packages

Remtec has applied its time-proven leadless ceramic SMT substrate technology to the development of a new line of standard SMT leadless packages for electro optical circuits matching standard JEDEC TO-style window lids. Remtec's packages are produced utilizing PCTF[®] (Plated Copper on Thick Film) metallization technology with PTV[®] hermetic plug vias and castellations on alumina, BeO and AlN ceramics.

Remtec's new packaging technique for optoelectronic circuits is based on extensive experience in design and manufacturing of various SMT leadless substrates and packages for RF and DC products complemented by company expertise in the fabrication of substrates and submounts for laser and photo diodes, LEDs, sensors and detectors.

Now economical surface mounted packages can be produced for a wide range of circuits and I/O configurations fully compatible with most of JEDEC TO-style window caps such as those used for TO-8, TO-5, TO-18, TO-39, TO-46, and others. Lids can be equipped with standard or narrow angle beam lenses. Products can operate at frequencies up to 10 GHz and higher required for high speed signal applications.

Leadless surface-mountable substrates compatible with standard window lids used for TO-style packages eliminate the need for through-hole mounting of the device on the PCB. In addition, the device assembly can be done in a multiple-up panel format utilizing automatic pick-and-place equipment that resulting in additional cost savings. PCTF[®] manufacturing technology enables Remtec to offer SMT ceramic package with fast turn-around, low up-front tooling costs and fast introduction to markets.

Designed around TO-style standard window lids the ceramic base can be customized for a specific circuit pattern and a number of I/O terminations (a typical pitch is 1.25mm). Lids can be either soldered to ensure hermeticity or attached with epoxy.

Applications include APD preamplifiers, LED sensors for non-invasive medical testing, VCSEL laser diodes, optical data transfer- systems, analytical instrumentation and circuits for sensing and detection of optical and photonic signal processing. For more information please refer to the Remtec web-site at www.remtec.com, or contact the factory at sales@remtec.com.



CERAMIC PACKAGING SOLUTIONS
FOR OPTIMUM PERFORMANCE