Laser Cutting Semiconductors

The semiconductor industry makes vital components for the technologies we all depend on. The semiconductor industry is looking for faster, smaller, more powerful, intricately precise, and massively efficient processes. Ultraviolet (UV) laser cutting is a perfect fit. The beam on these systems can hold up to .0005″ tolerance, it can cut complex profiles, and it can easily change the required cut by altering the computer aided design (CAD) file.

Laser machines can also process a variety of materials like Polyimide (Kapton), Polyimide (Cirlex), Q-pad, and Grafoil. Processing those materials using lasers can add huge value to the overall supply chain for the semiconductor industry.
Gaskets for instance, used in semiconductor processing are vital in the production stream. The uniformity of the cut profiles for parts ranging in size from 11.500” inches OD x 9.75” ID to 19.600” ODx17.75” ID, are a requirement when used in such conditions. Tolerances held are as small as +/- .001” mil. Utilizing a beam diameter of 20um, this kerf creates well defined sharp edges, straight walls, and consistent cuts. Whether a simple or complex geometry, a shim can be vital in the functioning of mechanical devices. Requiring more durability, shims from stainless steel reinforced Grafoil, have proven to be a welcomed solution. From sizes of .250 O.D. up to 5.40 O.D., and a tolerance of +/- .001” mil is providing reliable long-term use.

Semi Conductor - A-Laser Precision Laser Cutting

A-Laser Precision Laser Cutting - Laser Ablation, UV and IR Lasers