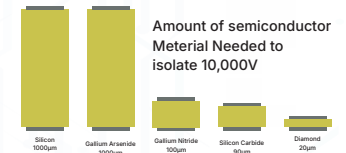
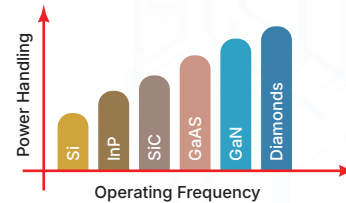
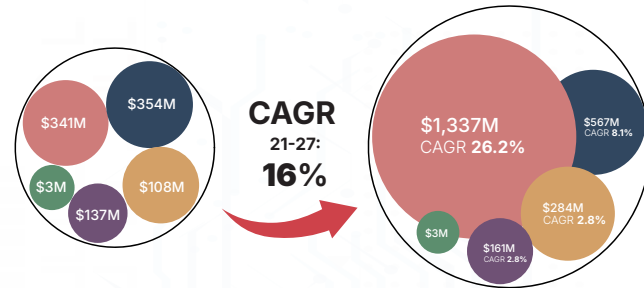




Diamonds boost performance and durability across various applications due to their unmatched hardness, efficient heat dissipation, clear optics, and versatile electronic properties. They are a game-changer in modern technology.

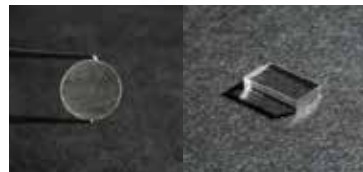


2021-2027 Compound Semiconductor substrate market Forecast (in\$M)



About us

Lab-grown diamonds are finding increasing application in technological fields. At URR Manufacturing, we leverage our advanced CVD technology to produce high-quality diamonds, tailored to meet the needs of these demanding applications.



URR Manufacturing is shaping the future of subcomponent technology through the power of lab-grown diamonds. With over 200+ advanced CVD equipment and high-performance diamond manufacturing facilities, we are focused on quality and precision.



scan for links

www.urrmanufacturing.com

Technical Grade

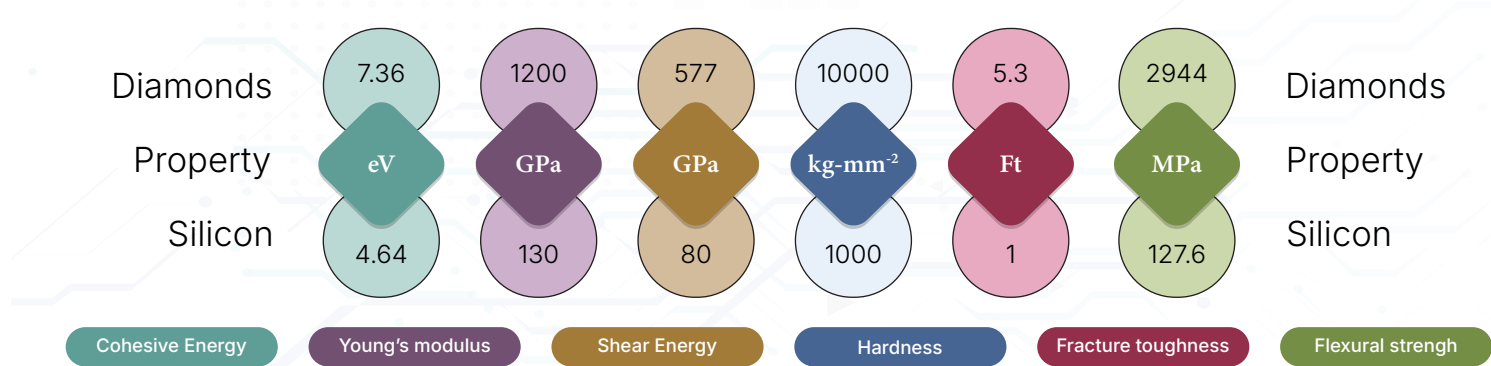
Lab-grown diamonds have a high thermal conductivity, which allows them to disperse heat efficiently. This feature is critical in applications where overheating can occur. The ability to manage heat effectively makes them a valuable material in advanced technology and industrial applications.

Optical Grade

Lab-grown diamonds emerge as the ideal material for high-precision optical systems. With 71% transmittance (250 nm–25 μ m), a refractive index of 2.38 and 2.65, and thermal conductivity ranging from (1100–2200 W/mK), our LGD's ensure superior heat dissipation and light control.

Mechanical Grade

Mechanical lab-grown diamonds are recognized for their exceptional hardness and durability. Thanks to their versatility, these diamonds play a crucial role in industries that require high-performance materials, such as cutting, grinding, polishing, and drilling.



Thermal Grade

Thermal-grade lab-grown diamonds are well-known for their superior heat management capabilities. With a high thermal conductivity (~2200 W/mK), low thermal expansion coefficient (2×10^{-6} $^{\circ}$ C⁻¹) and high Young modulus (~900 GPa), they improve not only the performance of electronic components, but also the overall energy efficiency.

Medical Grade

Lab-grown diamonds are making a remarkable impact in the medical industry. These diamonds are effectively integrated into a diverse range of modern medical tools, from precision surgical instruments to advanced diagnostic devices. This helps enhance the longevity of these essential devices, ultimately improving the quality of care for people.

Gems and Jewellery

Leveraging 35-40 years of diamond and jewelry manufacturing expertise, we offer a diverse range of jewelry from accessories to fine to wedding collections. We manufacture both natural and lab-grown diamonds and have a global presence with offices located in New York, Dubai, Antwerp, Hong Kong and Mumbai.