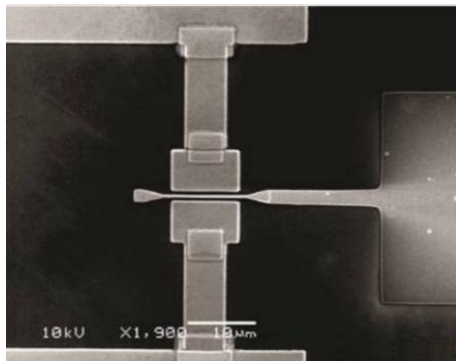
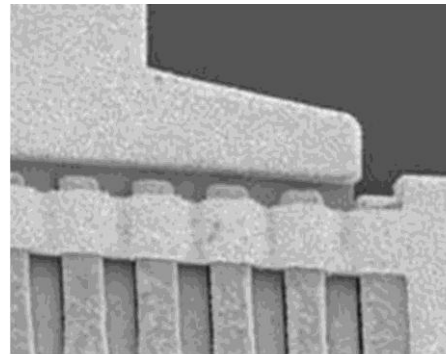


INEX is developing diamond semiconductor process and production technology for Diamond Microwave Devices Ltd, with the aim of creating high-power, high-frequency semiconductor devices with performance exceeding that of emerging GaN on SiC devices. These diamond devices will provide power, weight, size, and cost of ownership advantages over Travelling Wave Tube Amplifier technology, with applications in microwave power amplifiers and transmitters in both civil and defence systems.



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**Substrate:** Diamond (3.5 x 3.5 mm<sup>2</sup>)

**Technology:** Sub-micron gates, mesa etch, metallisation and patterning, thru vias

**Scope:** Research & Development

**Integration:** Multi-finger high power devices

**Application:** Solid-state, high power, compact microwave power amplifiers and transmitters for use in civil and defence systems such as compact lightweight radar, etc.