



## Krytar Case Study

### Leading the Way in the Broadband Component and Testing Industry

#### IN GOOD COMPANY

Krytar's founder, Thomas Russell, is what you'd call a pretty big deal in the microwave industry. Considered one of the industry's legends, Russell has made contributions that are often listed alongside those of Harry Boot, John Randall, and Marconi himself.

Like the firsts of WW II-era radar systems and turn-of-the-twentieth-century wireless signals, Russell's computer-aided engineering (CAE) solution for the creation of microwave couplers was a game changer. His proprietary CAE tool has evolved with Krytar and is used to design and develop many of the company's products today.

Headquartered in Sunnyvale, California, [Krytar, Inc.](#), is *the* name in high-performance, high-frequency ultra-broadband component and testing solutions. Industry pioneer Thomas J. Russell founded Krytar in 1975 and built a reputation for excellence that stands strong today.

Krytar's president, Doug Hagan, has been at the helm since 2009, guiding the company as its product line has expanded to meet the needs of a diverse, growing customer base.

"We provide the highest standard of broadband test and measurement components available to the radio frequency (RF) and microwave industry. Krytar supports development of all types of systems, including radar and satellite," said Hagan.

Krytar therefore relies on partners who share a commitment to service. "Sunstone Circuits shares our values and standards," said Hagan. "That's why we chose them to be our RF circuit manufacturer."

### Partners Committed to Excellence

Choosing the right partner for RF and microwave circuit prototype and manufacture involved more than aligning mission statements. "Sunstone does what we do," said Hagan. "We build high-performance components. They do the same. We welcome the challenge of custom solutions; so do they."

“Our broadband catalog is extensive, with over two hundred off-the-shelf products covering all different frequencies and bandwidths,” said Hagan. RF engineers need certain tools to deliver performance and quality for their system—be it a test component, a subsystem, or the entire test environment. Krytar works closely with customers to match test and measure solutions to specific needs.

“Krytar products, both standard and custom components, require perfect execution of manufacture to function properly when deployed in a test environment,” said Hagan.

## No Room for Error

For Krytar’s microwave components and test systems to work as designed, the RF circuit function must be optimal. When dealing with high frequency and high performance, if the physical circuit deviates from design by even a tiny fraction of millimeter, it can have a very negative impact on the operation.

“It’s critical that the manufactured board accurately reflects design,” said Hagan. “Sunstone understands that, and they never let us down.”

The higher the frequency, the smaller the wavelength—making it critical to maintain tolerances and stick to design specification. That’s no small feat, even in the best of circumstances.

“Sunstone is great to work with, and together we build great products.”

- Doug Hagan, President, Krytar, Inc.



test system. We need to deliver it right now.”

“We often work with organizations who require a rapid response,” said Hagan. “It’s not enough to deliver them a perfect component or

## Perfection in a Hurry

“Typically, we develop a design and do modeling. Sunstone receives the completed design files and begins manufacturing,” said Hagan.

Collaboration doesn't end there. "Sunstone is willing to provide input on the design if they have ideas about how to improve upon a circuit," said Hagan.

Trust is everything in those situations. "When the clock is ticking loudest, that's when we most appreciate Sunstone's top-to-bottom commitment to service," said Hagan.

## Continuous Innovation

Krytar's commitment to customer service goes beyond the typical. In addition to responsive support, speedy order fulfillment, and dependable quality, innovation represents a critical component of the Krytar value proposition.



Customers never stop coming up with new broadband systems to test. "We enable our customers to push boundaries with their broadband application ideas," said Hagan.

Sunstone is proud to be part of the Krytar success story. "Our customers constantly present us with new challenges, and we do the same with our partners," said Hagan. "We're not afraid to ask for something different from Sunstone on behalf of our customers, because we know they'll deliver what we need. Every time."