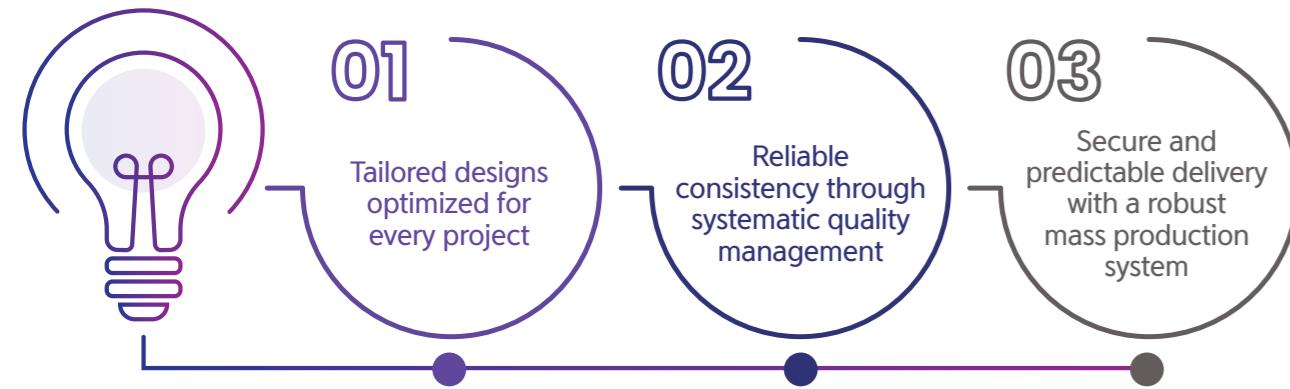


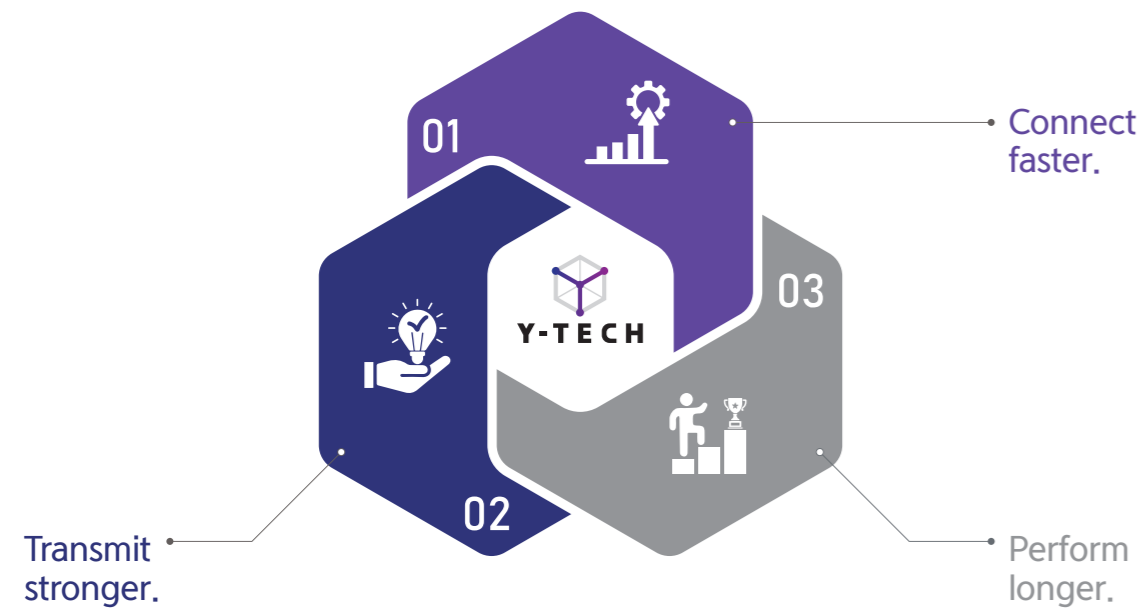
Why Y.TECH? Trusted in Space & Defense

With proven expertise and years of experience, Y.TECH meets the toughest demands of the defense industry. We deliver performance and reliability beyond expectations, ensuring quality and on-time supply as a trusted partner in space and defense.

Quality & Delivery Excellence in Both Quality and Delivery



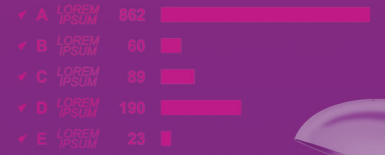
With Y.TECH



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Mission-Ready LTCC RF Solutions For Space & Defense



LTCC Space-Grade Reliability

- Stability Optimized for Satellite and Defense Communications with LTCC Technology

Y-TECH PRODUCTS

APPLICATION FIELDS

Extreme Temperature Endurance

- Supports a wide operating range of -55°C to +125°C thanks to LTCC material properties
- Minimal dielectric constant variation ($\Delta\epsilon_r$) under temperature change, ensuring stable frequency performance (TCF ↓)

Low Dielectric Loss

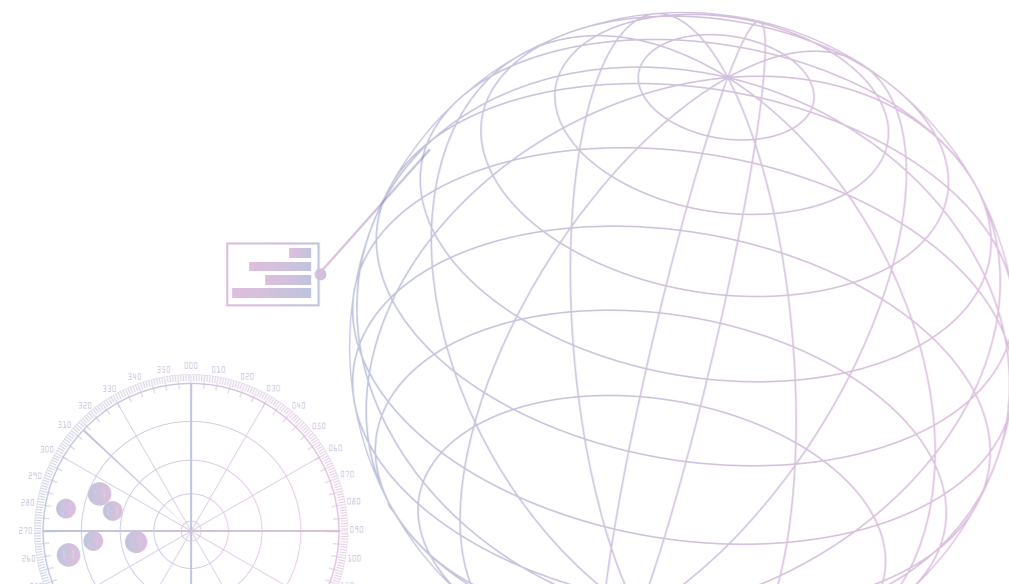
- Minimizes insertion loss in high-frequency and mmWave bands (Ka/Q/V/X-band)
- Maintains signal integrity, essential for long-distance transmission and precision communications

High Frequency Precision

- Precise dielectric control through ceramic sintering processes
- Ensures long-term stability of frequency bands and filter characteristics

Multilayer Integration


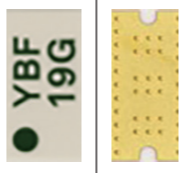
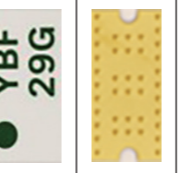

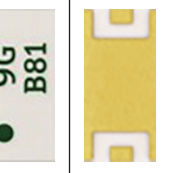
- Incorporates passive components (R, L, C), transmission lines, and shielding structures into a single LTCC package
- Reduces component count, enables miniaturization, and improves thermal stability



LTCC RF components are next-generation ceramic solutions engineered for space and defense systems that demand high frequency and uncompromising reliability.

Spanning from Ka/Q/V/X bands to Sub-6GHz, they deliver low dielectric loss and strong out-of-band rejection, with compact and lightweight designs that integrate seamlessly across diverse platforms.

Y.TECH's LTCC RF components, built on excellent electrical and mechanical properties, deliver ideal performance even in the extreme environments of satellites, radars, UAVs, and military communication systems.

	8x8 Array Antenna	YBF19000 G01	YBF29000 G01	YBF8550 G01	YLF9170 G01
Appearance					
Freq. (GHz)	30 / 50GHz	17.7 – 21.2	27.5 – 31.0	8.5 – 8.6	DC – 9.17
Ins.Loss	-	Typ. 1.1 dB	Typ. 1.5 dB	Typ. 1.0 dB	Typ. 1.0 dB
Attenuation	-	40 dB	50 dB	45 dB	40 dB
Size (mm)	28,0X28,0 X0,85	3,76X2,10 X1,15	3,76X2,10 X1,15	2,00X1,66 X0,87	3,20X1,60 X0,85
Application	Satellite Tracking Tx/Rx	Ka-band Rx	Ka-band Tx	X-band Comm	Sub-6GHz

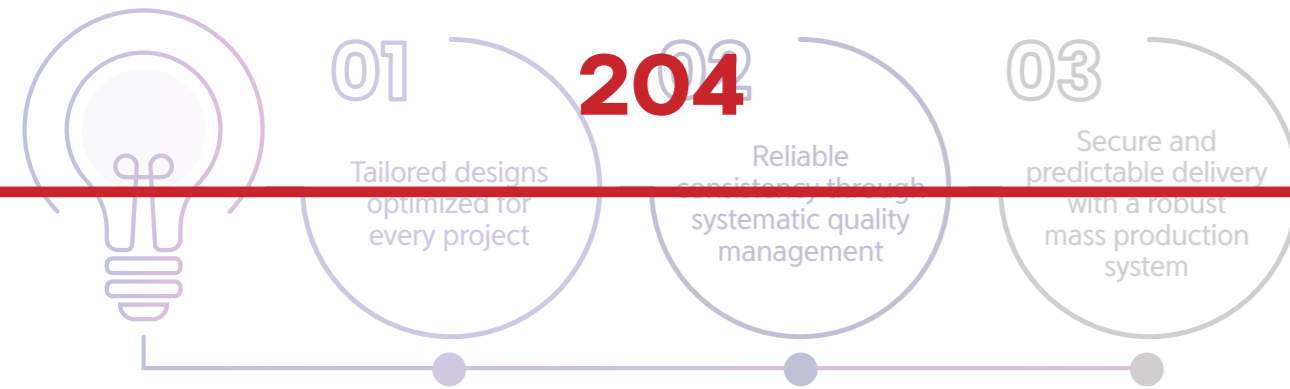
*All products are LTCC-based.

Application	LTCC RF Component Usage
Satellite Communication	Ka/X-band antenna modules, T/R modules, and phased array antennas — delivering high-frequency, low-loss signal performance.
Radar Systems	Band-pass filters (BPF), couplers, and hybrid modules for Tactical and AESA Radar — delivering high-power capability and outstanding performance in millimeter-wave bands.
Military Aircraft & UAV	RF modules that operate reliably even at high altitudes and in extreme environments — delivering superior reliability and compactness through LTCC technology.
Military Communication Equipment	Diplexers, isolators, and high-frequency filters — optimized for lightweight, high-density designs.

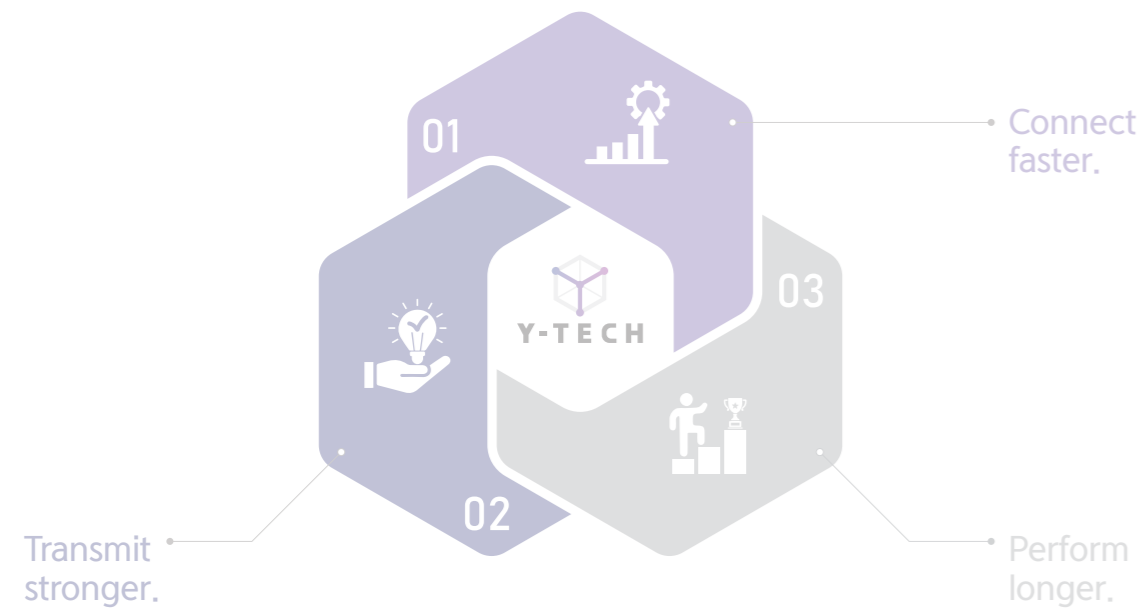
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