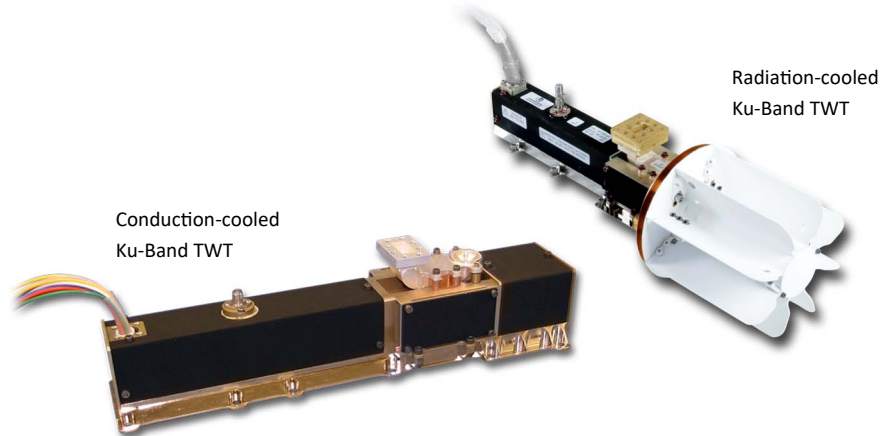


Ku-Band Space Traveling Wave Tubes (TWTs)

Stellant Systems' traveling wave tubes are key components for communications satellites. We have over five decades of experience developing TWTs for space-based applications.



Key Features

- Space-qualified, proven technology
- High reliability
- Highest efficiency in the industry: > 65%
- Radiation and conduction-cooled

SPECIFICATIONS

RF Power	30 W to 200 W
Frequency Range	10.7 GHz to 12.75 GHz
Bandwidth per TWT	≤ 1800 MHz
Saturated Gain	49 dB to 59 dB @ 500 MHz BW
Efficiency	66% to 70%
Phase Shift	45 ° (Sat to Sat -20 dB)
AM/PM Conversion	4.5 ° /dB @ Sat
Gain Ripple @ SS	0.35 dB p-p/33 MHz (WC)
Gain Slope @ SS	0.03 dB/MHz (WC)
C/3IM @ -3; -10; -17 dB	9.5 dBc; 15.5 dBc; 25 dBc
Configuration	Conduction and Radiation

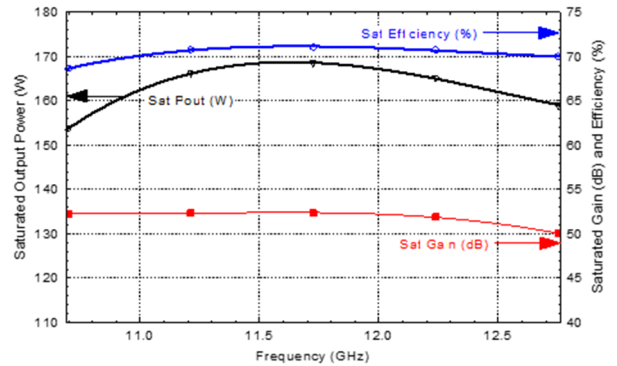
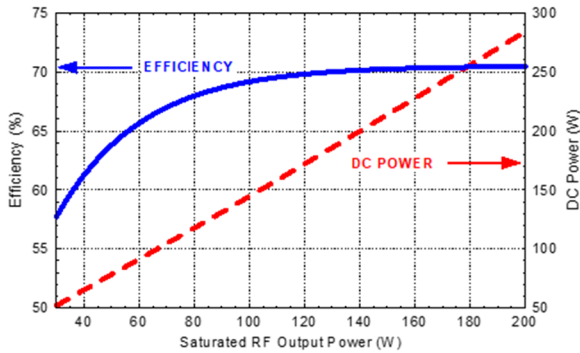
MECHANICAL CHARACTERISTICS

Mass – Conduction	700 g
Mass – Radiation	980 g
Dimensions (L x W x H)	
Conduction	11.8 in. x 3.1 in. x 2.7 in.
Radiation	14.8 in. x 5.0 in. x 5.0 in.
RF Input Connector	SMA
RF Output Connector	WR 75

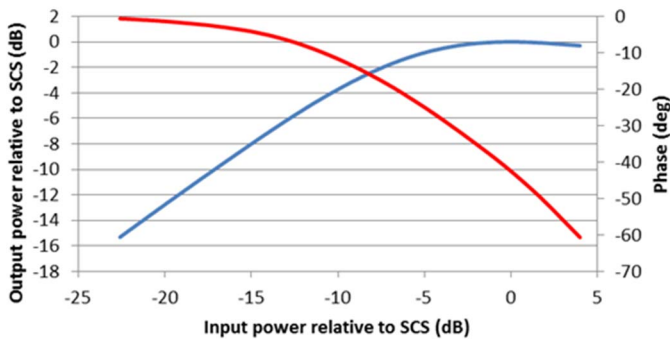
Go Farther.

Ku-Band Space Traveling Wave Tubes (TWTs)

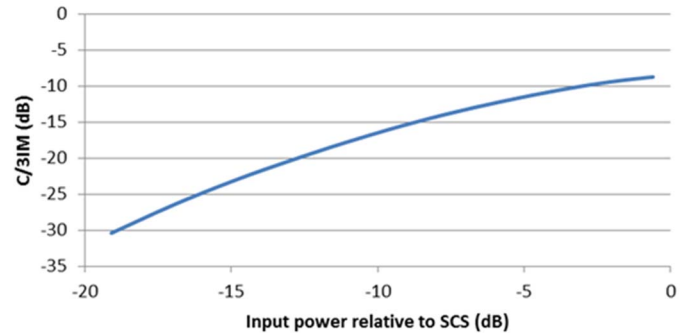
TWT Efficiency and Wideband Performance



TWT Linearity



Two-Tone Performance



www.StellantSystems.com

Stellant Systems is a partner for civil, military, and commercial organizations whose missions seek to ensure a safe, aware, and connected world.

We are a premier manufacturer of critical spectrum and power amplification systems for defense, space, medical and industrial customers worldwide.

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