SST-2030533023-KF-SE1

Coaxial Transmitter, 17 to 22 GHz, 28 dBm P_{1dB}, 23 dB Gain

SST-2030533023-KF-SE1 is a coaxial integrated transmitter module for radar systems. The transmitter has a typical conversion gain of 23 dB with a typical P1dB of 28 dBm in the frequency range of 17 to 22 GHz. The required LO power is +5 dBm between frequencies of 8 and 12 GHz. The RF transmit port is a 2.92 mm female connector while the LO and IF port is female SMA connectors. Other port configurations, are also available under different model numbers.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
RF Output Frequency	17 GHz		22 GHz
IF Input Frequency	DC		7 GHz
IF Input Power			+18 dBm
LO Frequency	8 GHz		12 GHz
LO Input Power		+5 dBm	+10 dBm
Conversion Gain		23 dB	
P_{1dB} (DSB)		+28 dBm	
P_{sat} (DSB)		+30 dBm	
Bias Voltage	+6 V_{DC}	+8 V_{DC}	+15 V_{DC}
Bias Current		900 mA	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

Item	Specification
RF Ports	2.92 mm (F)
LO Port	SMA (F)
IF Port	SMA (F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	2.0 Oz
Size	1.10” (W) X 1.95” (L) X 0.40” (H)
Outline	SR-SC

ECCN

EAR99

FEATURES

- High Gain and Power
- Built in x2 LO Multiplier
- Fully Integrated Module

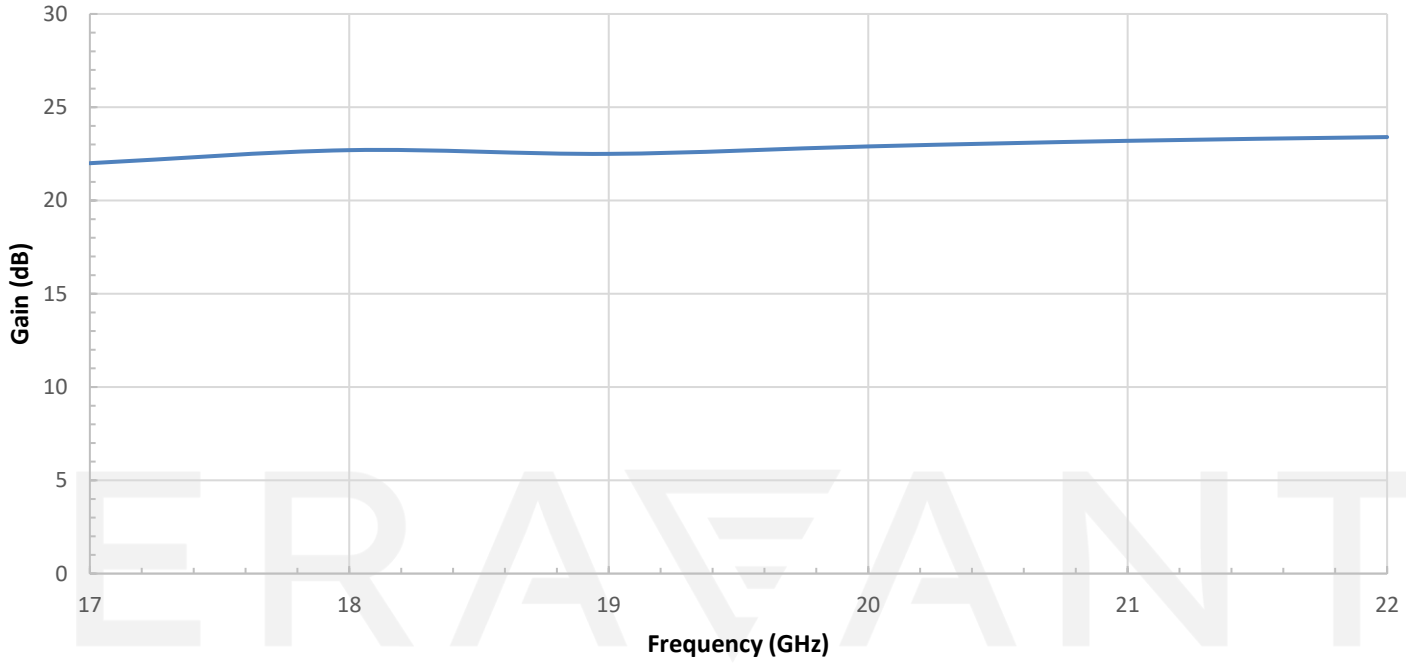
APPLICATIONS

- 5G Systems
- Radar Systems

SUPPLEMENTAL DETAILS

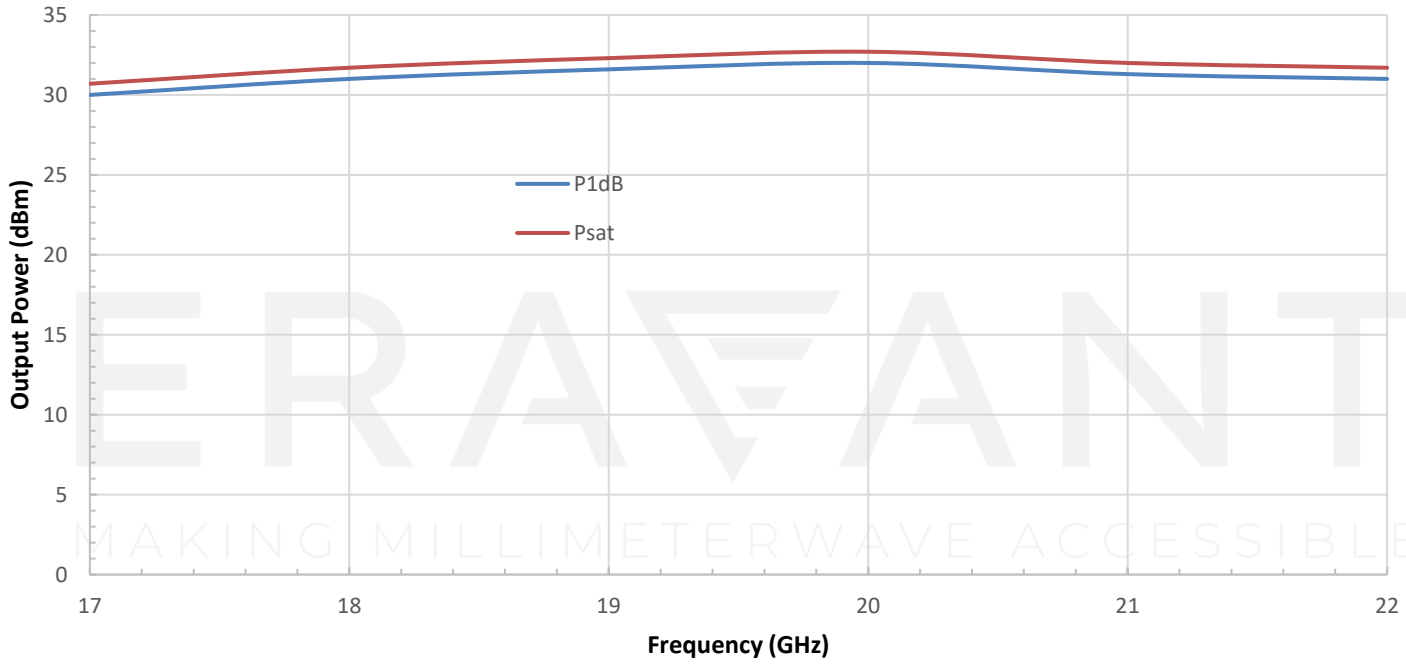
Gain vs. Frequency

Bias: +8 V_{DC}/990 mA

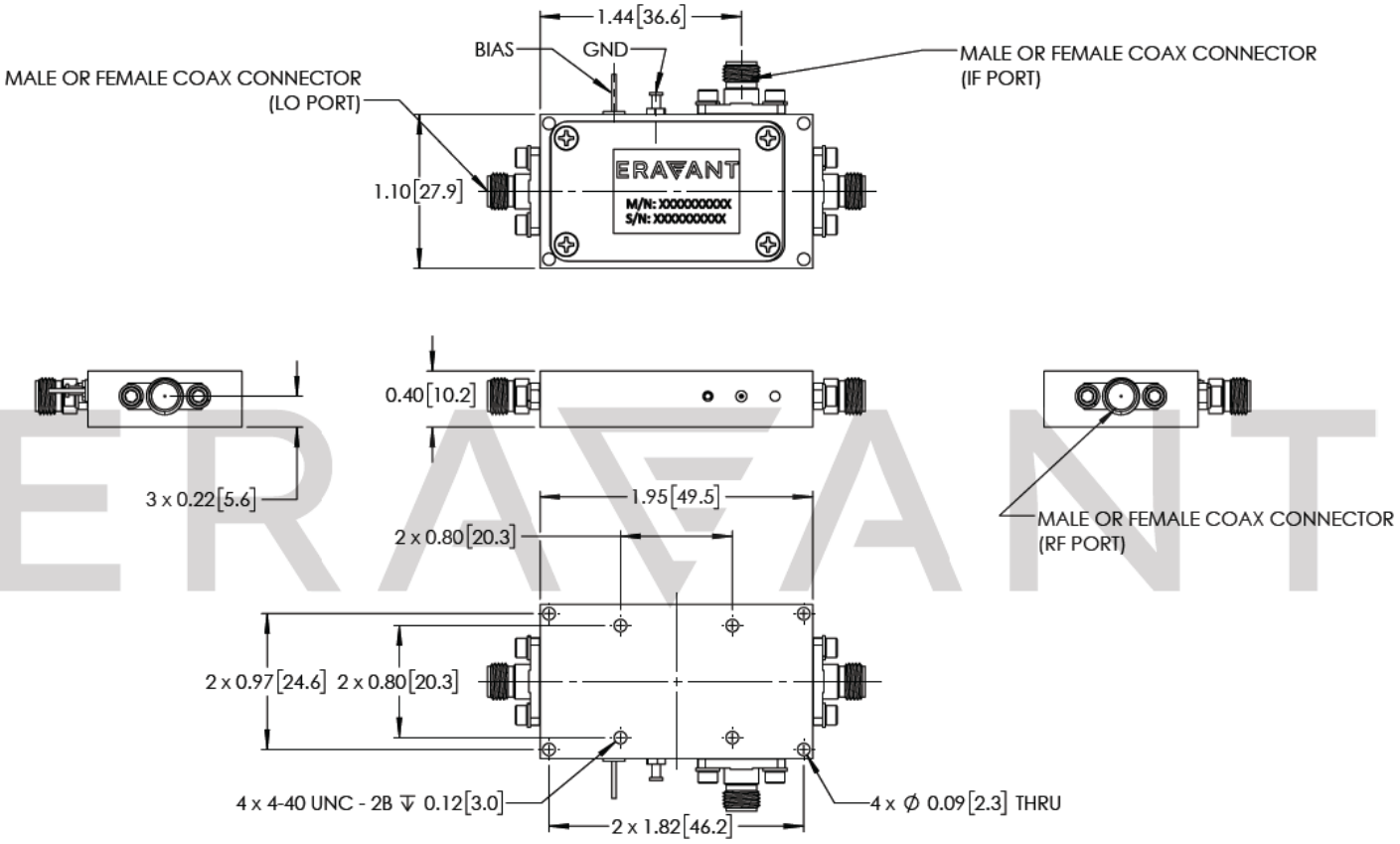


Output Power vs. Frequency

Bias: +8 V_{DC}/990 mA



Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



NOTE:

- Eravant reserves the right to change the information presented without notice.
- Other mechanical configurations are available under different model numbers.

CAUTION:

- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.
- The case temperature of the device shall never exceed +50 ˚C. Use proper heatsink or fan if necessary.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended