WR-15 Transmitter, 56 to 71 GHz, 23 dBm P_{1dB} , 25 dB Gain

SST-6431532525-15-SE1 is a WR-15 integrated transmitter module for communication systems. The transmitter has a typical conversion gain of 25 dB with a typical P1dB of 23 dBm in the frequency range of 56 to 71 GHz. The required LO power is +5 dBm between frequencies of 9.17 and 12.17 GHz. The RF transmit port is a WR-15 Waveguide with UG-385/U Anti-Cocking Flange 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	56 GHz		71 GHz
IF Input Frequency	DC		16 GHz
IF Input Power			+10 dBm
LO Frequency	9.17 GHz		12.17 GHz
LO Input Power		+5 dBm	+15 dBm
Conversion Gain		25 dB	
P _{1dB} (DSB)		+23 dBm	
P _{sat} (DSB)		+25 dBm	
Bias Voltage	+6 V _{DC}	+8 V _{DC}	+12 V _{DC}
Bias Current		1.8 A	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

Copyright © 2023 by Eravant

www.eravant.com | 424-757-0168 | support@eravant.com

Item	Specification	
RF Ports	Ports WR-15 Waveguide with UG-385/U Anti-Cocking Flange	
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 0.75" (H)	
Outline	SR-SV-A-1	

ECCN

3A001.b.7

FEATURES

- High Gain and Power
- Built in x6 LO Multiplier
- Fully Integrated Module

APPLICATIONS

• Communication Systems

SUPPLEMENTAL DETAILS

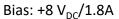


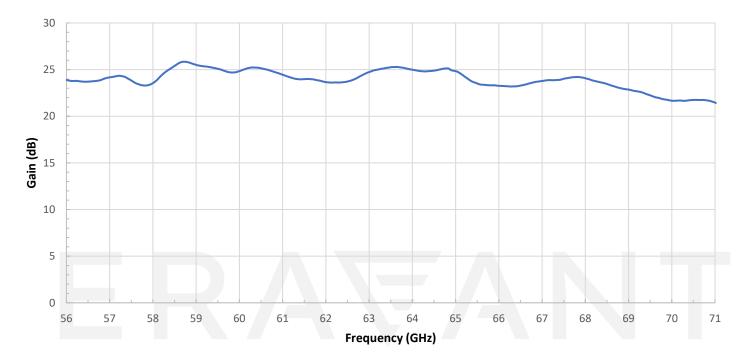


SST-6431532525-15-SE1

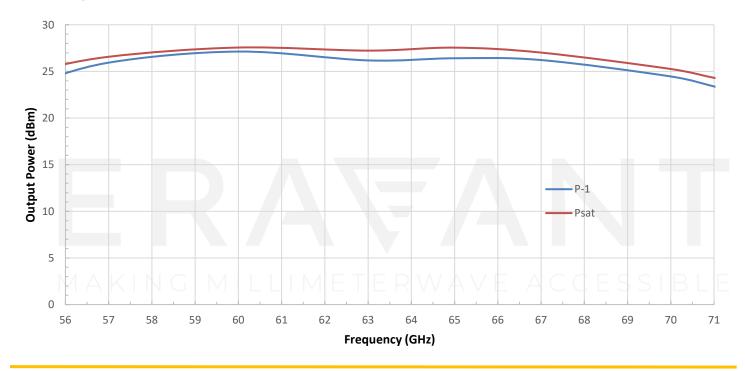
ERA\ANT

Gain vs. Frequency





Output Power vs. Frequency DEFERMANE ACCESSIBLE Bias: +8 V_{DC}/ 1.8A

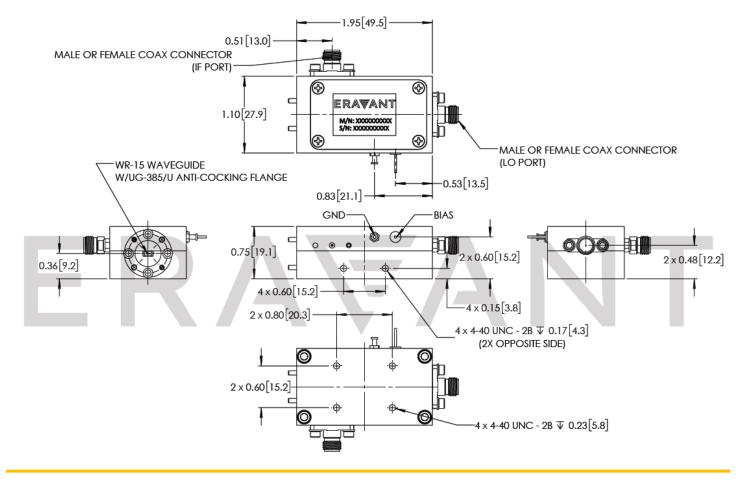


www.eravant.com | 424-757-0168 | support@eravant.com Copyright © 2023 by Eravant

SST-6431532525-15-SE1

ERAWANT

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 <u>SCH-08008-S1</u> is highly recommended

MAKING MILLIMETERWAVE ACCESSIBLE