STB-7531142326-1010-S1-C

75 to 110 GHz, Compact Power Amplifier, 23 dB Gain, +26 dBm Psat

STB-7531142326-1010-S1-C is a W-Band, compact benchtop power amplifier with a typical small signal gain of 23 dB and a nominal Psat of +26 dBm across the frequency range of 75 to 110 GHz. An AC to DC power adapter is provided so that the power supply required is a single phase AC voltage in the range of 100 to 240 V_{AC}, which can be supplied by a wall outlet or lab benches. The fan helps to keep the amplifier working at around room temperature. An integrated USB-C flash drive is

included in the package. The input and output ports are WR-10 waveguides with standard UG-387/U-M anti-cocking flanges.

Mechanical Specifications:

Item	Specification		
Input/ Output Ports	WR-10 Rectangular Waveguide with UG-387/U-M Anti-Cocking Flange		
Bias Connector	2.5 mm DC Jack (AC-to-DC power converter included)		
Enclosure Material	Aluminum		
Finish	Various		
Weight	1.5 lbs		
Size	2.36" (L) X 2.36" (W) X 4.1" (H)		
Outline	TB-SW-A-C		

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	75 GHz		110 GHz
Small Signal Gain		23 dB	
P _{1dB}		+15 dBm	
PSat		+26 dBm	
Pin			+18 dBm
Port Return Loss		6 dB	
Power Supply (AC Adapter Provided)	100 VAC		240 V _{AC}
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C



• Forced Air Cooling In-line Port Configuration • **High Output Power**

APPLICATIONS

ECCN 3A001.b.4

FEATURES

- **Communications Systems** •
- **Test Equipment** •
- Bench Top Power Amplification •

SUPPLEMENTAL DETAILS

www.eravant.com | 424-757-0168 | support@eravant.com Copyright © 2024 by Eravant

ERAVANT

STB-7531142326-1010-S1-C



Typical Measured Gain and Return Loss vs. Frequency

Typical Measured Output Power vs. Frequency



ERAWANT

STB-7531142326-1010-S1-C

ERA\ANT

Mechanical Outline:

Unless otherwise specified, all dimensions are in inches [millimeters])



- -

NOTE:

- All data presented is collected from a sample lot. Actual data may vary unit to unit.
- All testing was performed under +25°C case temperature.
- AC-to-DC power adapter with cord is included
- Other mechanical configurations with other frequency bands are available under different model numbers.
- Eravant reserves the right to change the information presented without notice.

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.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.

MAKING MILLIMETERWAVE ACCESSIBLE