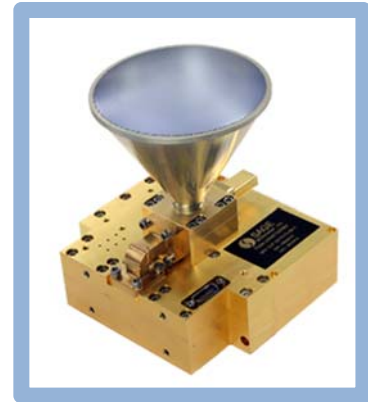




26.8 GHz Integrated Transmitter Module, Space Qualified

Description:

Model SST-2730223027-28-S1 is a Ka Band compact transmitter module operating at 26.8 GHz. This product is designed and manufactured for small satellite applications. The module incorporates a phase locked oscillator to convert 1.0 GHz signal to 26.8 GHz signal. With an integrated 23 dBi circular polarized lens corrected antenna, the module delivers +50 dBm EIRP. A robust filtering system greatly reduces the harmonic and spurious levels, making the module a great choice for ground, ground to satellite and satellite to satellite communication applications.



Features:

- 26.8 GHz Operation
- High Linear Output Power
- Space Qualified

Applications:

- Communication Systems
- Small Satellite Systems
- CubeSat Systems

Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|----------------------------|---|---------------------------|----------|
| Antenna 3 dB Beam-width | | 10° | |
| Antenna Side Lobes | | -20 dB | |
| Antenna Polarization | Circular | | |
| TX Frequency Range | 26.7 GHz | | 26.9 GHz |
| TX Output P _{1dB} | + 27 dBm | +29 dBm | |
| TX EIRP | +50 dBm | +52 dBm | |
| IF Frequency Range | 0.9 GHz | | 1.1 GHz |
| IF to TX Linear Gain | | 23 dB | |
| IF P _{in} | 0 dBm | +4 dBm | +8 dBm |
| IF Input VSWR | | 1.5:1 | |
| Harmonics | | -50 dBc | |
| Spurious | | -60 dBc | |
| Phase Noise | -80 dBc/Hz @ 1 KHz; -90 dBc/Hz @ 10 KHz and -100 dBc/Hz @ 100 KHz | | |
| DC Supply Voltage | | +8 V _{DC} /1.5 A | |
| Case Temperature | -25°C | | +65°C |

Mechanical Specifications:

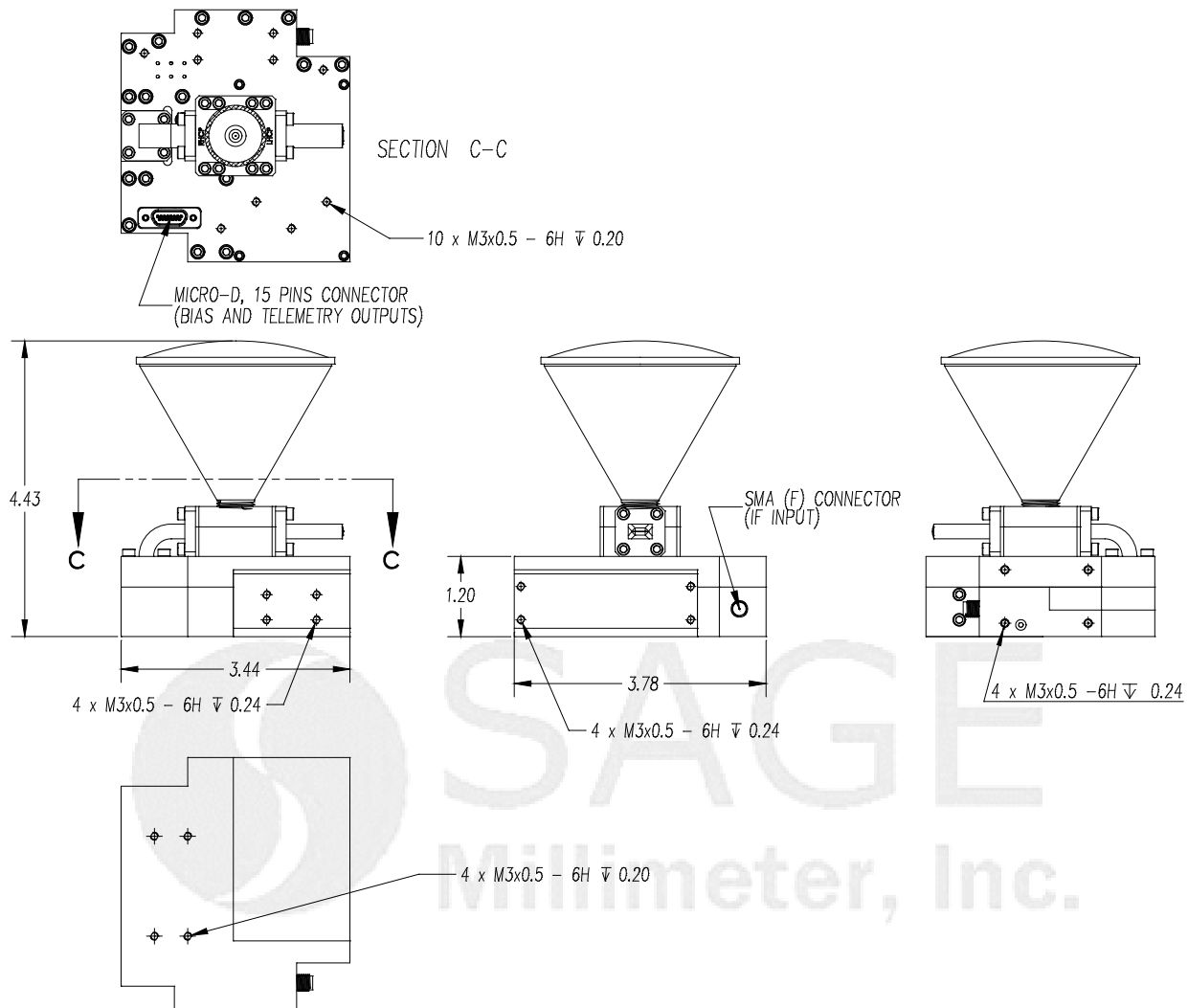
| Item | Specification |
|-----------------|-----------------------------------|
| IF Input | SMA(F) |
| Bias and Others | Micro-D, 15 Pins (Female) |
| Size | 3.78" (W) X 3.44" (L) X 4.43" (H) |
| Weight | 24 Oz |

www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com



26.8 GHz Integrated Transmitter Module, Space Qualified

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



Note:

- SAGE Millimeter, Inc. 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 +85°C. Use additional heatsink or fan if necessary.