

## SST-2430630005-42-S1

### K-Band Transmitter, 21.0 to 27.0 GHz

**SST-2430630005-42-S1** is a K-Band transmitter. The transmitter has a typical conversion gain of 3 dB with a typical IF input P-1 dB of +5 dBm in the frequency range of 21.0 to 27.0 GHz and a IF output frequency range of DC to 4.0 GHz. The required LO power and frequency range are 0 dBm and 12.0 GHz, respectively. The LO and IF port are both equipped with female SMA connectors and the RF port is a WR-42 waveguide with a UG-595/U flange. K(F) RF port option is available under a different model number.



### Electrical Specifications:

| Parameter                 | Minimum            | Typical             | Maximum             |
|---------------------------|--------------------|---------------------|---------------------|
| IF Input Frequency        | 10 MHz             |                     | 4.0 GHz             |
| IF Input P-1 dB           |                    | +5 dB               |                     |
| RF Output Frequency       | 21.0 GHz           |                     | 27.0 GHz            |
| IF to RF Conversion Gain  | 0 dB               | 3 dB                |                     |
| 2LO to RF Isolation       |                    | 35 dB               |                     |
| 2LO to IF Isolation       |                    | 35 dB               |                     |
| LO Frequency              |                    | 12.0 GHz            |                     |
| LO Input Power            | -4 dBm             | 0 dBm               | +13 dBm             |
| Bias Voltage              | +6 V <sub>DC</sub> | +10 V <sub>DC</sub> | +15 V <sub>DC</sub> |
| Bias Current              |                    | 170 mA              |                     |
| Specification Temperature |                    | +25°C               |                     |
| Operating Temperature     | -25°C              |                     | +65°C               |

### Mechanical Specifications:

| Item           | Specification                        |
|----------------|--------------------------------------|
| RF Port        | WR-42 Waveguide with UG-595/U Flange |
| IF and LO Port | SMA (F) and SMA (M)                  |
| Bias           | Solder Pin                           |
| Size           | 1.60" (W) X 1.50" (L) X 0.50" (H)    |
| Weight         | 2.0 Oz                               |
| Finish         | Gold Plated                          |
| Outline        | ST-SK                                |

### ECCN

EAR99

### FEATURES

- Compact Size
- Sub-harmonically Pumped Mixer
- Fully Integrated Module

### APPLICATIONS

- Radar Systems
- Communication Systems
- System Integration

### SUPPLEMENTAL DETAILS

