

RS1Z19

Full Ku-Band PLL VSAT LNB

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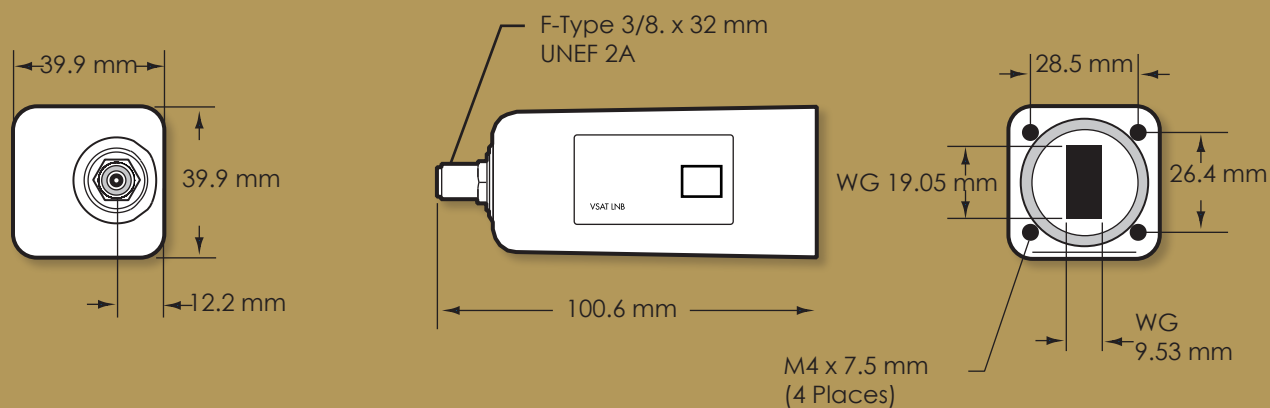
Ku-Band LNB



- Low Cost PLL LNB
- Full Ku-Band Frequency Range in Two Switchable Bands
- Band Switching with 22 kHz Tone
- PLL-Type Local Oscillator with Internal +/- 25 ppm Reference
- Input Transmit Reject Filtering
- Compact, Lightweight Form Factor
- O-ring, Hardware Included
- CE Compliant
- RoHS Compliant



Dimensions



SPECIFICATIONS

RS1Z19 Full Ku-Band PLL VSAT LNB

Electrical Specifications

Parameter		Minimum	Typical	Maximum	Unit	Note
RF Input Frequency Range	Low Band	10.70		11.70	GHz	
	High Band	11.70		12.75	GHz	
IF Output Frequency Range	Low Band	950		1950	MHz	
	High Band	1100		2150	MHz	
Local Oscillator Frequency	Low Band		9.75		MHz	nominal
	High Band		10.60		MHz	
Local Oscillator Tolerance	Overall			± 25	ppm	From Nominal
Local Oscillator Integrated Phase Noise (SSB)	@ 1 kHz			-75	dBc/Hz	
	@ 10 kHz			-78	dBc/Hz	
	@ 100 kHz			-83	dBc/Hz	
	@ 1 MHz			-103	dBc/Hz	
Local Oscillator Integrated Phase Noise	1kHz – 10 MHz		1.6	2.0	°	DSB RMS phase jitter
Noise Figure @ 25° C	w/o OMT-TRF		0.8	1.1	dB	
Conversion Gain		50	55	61	dB	
Tx Signal Immunity (change relative to nominal)	Conversion Gain			0.2	dB	With Tx signal from 13.75-14.5 GHz
	Noise Figure			0.2	dB	At -20 dBm on the input
In-band Gain Variation	Overall			6	dB	Max – Min
	Any 36 MHz			1.5	dB	
	Any 500 MHz			5.0	dB	
Image Band Rejection		35			dB	
IF Output IP3		+10			dBm	Carrier Spacing > 5 MHz
IF Output P1dB		2			dBm	
IF Output Spurious	In-band			-40	dBc	@ IF O/P carrier = -15 dBm in 10 kHz
	Out-of-Band			-25	dBm	
IF Output Impedance			75		Ohm	
IF Output Return Loss		8			dB	
IF Output Connector						F-Type Female
Control Tone Frequency		18		26	kHz	Per EN 61319-1
Control Tone Level	Low Band	0		100	mV	pp
	High Band	400	600	800	mV	
Supply Voltage		10		24	V	
Supply Current			80	100	mA	
RF Input Connector						WR-75 Flange, grooved

General Specifications

Parameter	Minimum	Typical	Maximum	Unit	Note
Weight			170	g	
Operating Temperature	-40		+55	°C	
Moisture/Humidity Protection		IP67			Per EN 60529