

# Heritage Receiver/Downconverter Line Up

## Ku-band (FSS) RCVR



### Main Characteristics

- o Ku-band (FSS) RCVR consists of an RF Section and a DC/DC Converter.
- o RF Section converts the 14GHz input signals to the 12GHz output signals using external Local signal.
- o DC/DC Converter supplies the secondary voltage to the RF Section.
- o Key parameter of Ku-band (FSS) RCVR is as follows;
  - Low Noise Figure: 1.8dB max. +60degC, EOL
  - Gain: 58dB min.
  - C/3IM: 50dB min. (Pin = -54dBm each)
  - DC Power: 8.5W max.
- o Self gain compensation by using the Variable Gain Amp over temperature

### Specification Table

Parameter	UNIT	Typical Performance
RF FREQ	GHz	14.0 to 14.5
IF FREQ	GHz	11.7 to 12.2
LO FREQ	GHz	2.3
Usable Bandwidth	MHz	500
Gain	dB	58 min
Gain Flatness	dBp-p	0.75/500MHz
Noise Figure	dB	1.8 max
C/3IM	dBc	-50 at Pin=-54dBm
In-Band Spurious	dBc	-65
Out of Band Spurious		
2RF-7LO	dBc	-60
5*LO	dBm	-20
6*LO	dBm	-40
Frequency Stability	ppm	Setting +/-1.0 Over 15°C 1.0 Over Life +/-8.0
Phase Noise	dBc/Hz	
10Hz		-50 max
100Hz		-80 max
1KHz		-100 max
10KHz		-111 max
100KHz		-115 max
1MHz		-120 max
14GHz CPL OUT		
Frequency	GHz	13.994 to 14.001
Gain	dB	23 min.
Noise Figure	dB	1.8 max.
Power Consumption	W	8.5 max. (Using TCXO)
Dimension	mm	170x64x147
Mass	g	820 max
Temperature Range	°C	-15 to +60

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