

## Heritage Receiver/Downconverter Line Up

### X-band Downconverter



#### Main Characteristics

- o Down conversion of RF Signal
  - Input Frequency Range: 7.9GHz to 8.4GHz
  - Output Frequency Range: 7.25GHz to 7.75GHz
  - Local Frequency: 650MHz
- o X-band DNC consists of an RF Section, a Local Oscillator and a DC/DC Converter.
- o Self gain compensation over temperature using the variable gain MMIC AMP.
- o The secondary voltage supply (+5V, -5V) for X-band LNA.
- o High Linearity

### Specification Table

Parameter	UNIT	Meajor Performance
RF FREQ	GHz	7.9 to 8.4
IF FREQ	GHz	7.25 to 7.75
LO FREQ	MHz	650
Usable Bandwidth	MHz	500
Gain	dB	15 min
Gain Flatness	dBp-p	0.75/500MHz
Noise Figure	dB	27.5max
C/3IM	dBc	-51 at Pin=-9dBm (OICP=+33dBm)
In-Band Spurious	dBc	-65
Out of Band Spurious		
RF-3*LO	dBc	-35
2*Fout	dBc	-30
RF-2*LO, RF+LO	dBc	-10
RF Leakage	dBc	-9
11*LO, 12*LO	dBm	-35
Frequency Stability	ppm	Setting +/-1.0 Over 15°C +/-1.0 Over Life +/-4.0
Phase Noise	dBc/Hz	
10Hz		-60 max
100Hz		-83 max
10KHz		-103 max
1MHz		-130 max
Power Consumption	W	16 max. (Using TCXO)
Dimension	mm	170x64x147
Mass	g	885 max
Temperqtue Range	°C	-10 to +60