

* Active parts

Satellite Low noise block down Converter (LNB)



● Features

- ▶ Input Frequency Range 7.25~7.75GHz
- ▶ Output Frequency Range 950~1450MHz
- ▶ DC +12 ~ 24V

* Applications

- ▶ Satellite Receivers

Parameter	Specification
Input return loss	$\geq 9.5 \text{ dB}$
Output return loss	$\geq 14 \text{ dB}$
C-band(7~8GHz) filtering	55 dB
LO drift over temp.	Internal Ref. : $\pm 10 \text{ KHz}$ max. -62 dBc/Hz @ 100 Hz -72 dBc/Hz @ 1 KHz -82 dBc/Hz @ 10 KHz -92 dBc/Hz @ 100 KHz -102 dBc/Hz @ 1.0 MHz -112 dBc/Hz @ 10 MHz
Maximum phase noise(SSB) Internal Ref. / External Ref.	
OP1dB	+10 dBm
2 tone IMD	40 dBc @ tone 0 dBm
OIP3	-20 dBm
Maximum Tx Band(7.9~8.4GHz) signal level(-30dBm) that will not saturation the LNB and cause any N/F degradation.	
Gain	60 dB typ (55 dB ~ 65 dB) $\leq 1 \text{ dB p-p}$ over 36 MHz $\leq 3 \text{ dB p-p}$ over 120 MHz $\leq 4 \text{ dB p-p}$ over 500 MHz
Gain variation over temp.	
Spurious	Receive band -65 dBm max. (950~1450MHz)
	Out of band -50 dBm max. (200~2200MHz)
	Others -25 dBm max. (0.2~20GHz, except nLO)
LO leakage	IF output -30 dBm max.
	RF input -45 dBm max.
Image rejection 45 dB min., 60 dB typ.	
Noise Figure (N/F) 0.6 dB max @ 23°C (With SMA to WR-112 waveguide adapter)	
DC current 300 mA max.	