

Heritage Low Noise Amplifier Line Up

FSS LNA



BSS LNA



Main Characteristics

- o Low noise figure and high gain performance
 - Ku-band FSS;
 - Noise figure: 1.5 dB max. at +58degC
(f=12.75GHz to 13.2GHz, 13.75GHz to 14.50GHz)
 - Gain: 40 dB nom.
(f=12.75GHz to 13.2GHz, 13.75GHz to 14.50GHz)
 - Ku-band BSS;
 - Noise figure: 1.80 dB max. at +58degC
(f=17.3GHz to 18.1GHz)
 - Gain: 40 dB nom.
(f=17.3GHz to 18.1GHz)
- o Quad type configuration:
 - 4 LNAs (RF portion and 4 power supply boards)
- o Self gain compensation over temperature using the PIN diode attenuator

Specification Table

Parameter	Unit	Spec.	Typical Performance
Frequency Range			
Ku-Band FSS	GHz	12.75 to 13.25 for Low Band 13.75 to 14.50 for High Band	12.75 to 13.25 13.75 to 14.5
Ku-Band BSS	GHz	17.3 to 18.1	17.3 to 18.1
Usable Bandwidth			
Ku-Band FSS	MHz	500 for Low Band, 750 for High Band	Same as left
Ku-Band BSS	MHz	800	Same as left
Gain	dB	40.0±0.5	40.0±0.3
Gain Flatness over usable bandwidth	dBp-p	0.50 max over 500MHz Band	0.5 max.
Noise Figure			
Ku-Band FSS	dB	1.50 max.	1.50 max., 1.20 at Amb.
Ku-Band BSS	dB	2.00 max.	1.80 max., 1.50 at Amb.
ICP (C/3IM)	dBm	+19 min.(OIP3)	+19 min.
Power Consumption			
FSS DC Power	W	Per 1 LNA and 1 Power Supply 1.4 max.	0.9 max.
BSS DC Power	W	1.5 max.	1.0 max.
Mass (4LNAs with 4 Power supplies)			
Ku-Band FSS	kg	1.30 max.	1.2 nom.
Ku-Band BSS	kg	1.30 max.	1.0 nom.
Size (L x W x H)			
Ku-Band FSS	mm	158 x 144 x 91	Same as left
Ku-Band BSS	mm	151 x 144 x 91	Same as left
Temperature Range	degC	+5 min., +58 max.	Same as left