

Wide range of standard Ku-band LNB's with Noise Figures from 0.6 – 1.0 dB



US Monolithics provides microwave products and a comprehensive, advanced technology approach to your high volume communication systems. We work directly with you to optimize quality, cost, and performance for your microwave products. We bring you a combination of top-level, high frequency microwave systems knowledge and the experience to develop cost-effective, highly integrated custom MMIC chip sets and assemblies. The result is a high quality product, designed for high volume manufacturability and the lowest possible cost.

The US Monolithics ODU group can provide all your standard satellite communications outdoor units. We carry a complete line of standard Ku-band and C-band products including solid state block-up converters with power levels to 10 Watts, low-noise block-down converters for all frequency bands, and a full range of antennas up to 2.4-meter diameters.

Our capabilities include:

- Design and manufacture of high volume satcom and terrestrial microwave products
- Optimization of quality, cost, and performance
- Assessment of top-level system design options and tradeoffs
- Development of highly integrated custom MMIC chip sets and assemblies
- Design assurance for high volume manufacturability and the lowest possible cost
- Diverse technical staff, including the corporate resources of ViaSat

FEATURES

Frequency Configurations

- Available in Ku-band and Ext Ku-band configurations
- 10.95 to 11.70 GHz (Ku-band) RF frequency
- 10.00 GHz local frequency
- 14.25 GHz (Ext Ku-band) RF frequency
- 11.20 to 11.70 GHz (Ku-band) RF frequency
- 10.25 GHz (Ext) local frequency
- 11.70 to 12.20 GHz (Ku-band) RF frequency
- 10.75 GHz (Ext) local frequency
- 12.25 to 12.75 GHz (Ku-band) RF frequency
- 11.30 GHz (Ext) local frequency

Availability

- LNB PLL Ext Ref
- LNB PLL Int Ref
- LNB DRO
- Stabilities $\pm 3\text{ppm}$ to $\pm 10\text{ppm}$ and $\pm 0.5\text{MHz}$ to $\pm 1.5\text{MHz}$
- Noise Figure 0.6–1.0dB
- Available in N-type and F-type connectors

SPECIFICATIONS

PART NUMBER	PRODUCT DESCRIPTION							
	RF FREQUENCY	NOISE	LOCAL	STABILITY	IF FREQUENCY	GAIN	DC VOLTAGE	OUTPUT
KU BAND DRO LNB								
USLBDOF2B2	10.95 - 11.7 GHz	0.6-0.8 dB	10 GHz	+/- 0.9MHz	950 - 1,700 MHz	50 dB min	+15 to +24 VDC	F
USLBDOF2A2	10.95 - 11.7 GHz	0.6-0.8 dB	10 GHz	+/- 0.5MHz	950 - 1,700 MHz	50 dB min	+15 to +24 VDC	F
USLBDOF0C2	11.2 - 11.7 GHz	0.8 dB	10.25 GHz	+/- 1.5MHz	950 - 1450 MHz	54 dB min	+15 to +24 VDC	F
USLBDOFDA2	11.7 - 12.2 GHz	0.6-0.8 dB	10.75 GHz	+/- 0.5MHz	950 - 1450 MHz	54 dB min	+15 to +24 VDC	F
USLBDOF0B2	11.7 - 12.2 GHz	0.6-0.8 dB	10.75 GHz	+/- 0.9MHz	950 - 1450 MHz	50 dB min	+15 to +24 VDC	F
USLBDOFFB2	12.25 - 12.75 GHz	0.6-0.8 dB	11.3 GHz	+/- 0.9MHz	950 - 1450 MHz	50 dB min	+15 to +24 VDC	F
USLBDOFOA2	12.25 - 12.75 GHz	0.6-0.8 dB	11.3 GHz	+/- 0.5MHz	950 - 1450 MHz	54 dB min	+15 to +24 VDC	F
KU BAND PLL LNB EXT REF								
USLBPXF203	10.95 - 11.7 GHz	0.8-1.0 dB	10 GHz	DEPENDS ON EXT REF	950 - 1,700 MHz	50 dB min	+15 to +24 VDC	F
USLBPXN203	10.95 - 11.7 GHz	0.8-1.0 dB	10 GHz	DEPENDS ON EXT REF	950 - 1,700 MHz	50 dB min	+15 to +24 VDC	N
USLBPXF003	11.2 - 11.7 GHz	0.8-1.0 dB	10.25 GHz	DEPENDS ON EXT REF	950 - 1450 MHz	50 dB min	+15 to +24 VDC	F
USLBPXN003	11.2 - 11.7 GHz	0.8-1.0 dB	10.25 GHz	DEPENDS ON EXT REF	950 - 1450 MHz	50 dB min	+15 to +24 VDC	N
USLBPXFC03	11.45 - 11.95 GHz	0.8-1.0 dB	10.5 GHz	DEPENDS ON EXT REF	950 - 1450 MHz	50 dB min	+15 to +24 VDC	F
USLBPXFD03	11.7 - 12.2 GHz	0.8-1.0 dB	10.75 GHz	DEPENDS ON EXT REF	950 - 1450 MHz	50 dB min	+15 to +24 VDC	F
USLBPXND03	11.7 - 12.2 GHz	0.8-1.0 dB	10.75 GHz	DEPENDS ON EXT REF	950 - 1450 MHz	50 dB min	+15 to +24 VDC	N
USLBPXF003	12.20 - 12.75 GHz	0.8-1.0 dB	11.25 GHz	DEPENDS ON EXT REF	950 - 1450 MHz	50 dB min	+15 to +24 VDC	F
USLBPXN003	12.25 - 12.75 GHz	0.8-1.0 dB	11.3 GHz	DEPENDS ON EXT REF	950 - 1450 MHz	50 dB min	+15 to +24 VDC	N
USLBPXF003	12.25 - 12.75 GHz	0.8-1.0 dB	11.3 GHz	DEPENDS ON EXT REF	950 - 1450 MHz	50 dB min	+15 to +24 VDC	F
KU BAND PLL LNB INT REF								
USLBPIF282	10.95 - 11.7 GHz	0.8 dB	10 GHz	+/- 3PPM	950 - 1,700 MHz	55 dB min	+15 to +24 VDC	F
USLBPIN282	10.95 - 11.7 GHz	0.8 dB	10 GHz	+/- 3PPM	950 - 1,700 MHz	55 dB min	+15 to +24 VDC	N
USLBPIF292	10.95 - 11.7 GHz	0.8 dB	10 GHz	+/- 10PPM	950 - 1,700 MHz	55 dB min	+15 to +24 VDC	F
USLBPIF082	11.2 - 11.7 GHz	0.8 dB	10.25 GHz	+/- 3PPM	950 - 1450 MHz	55 dB min	+15 to +24 VDC	F
USLBPIF082	11.7 - 12.2 GHz	0.8 dB	10.75 GHz	+/- 3PPM	950 - 1450 MHz	55 dB min	+15 to +24 VDC	F
USLBPIFD82	11.7 - 12.2 GHz	0.8 dB	10.75 GHz	+/- 3PPM	950 - 1450 MHz	55 dB min	+15 to +24 VDC	N
USLBPIF292	11.7 - 12.2 GHz	0.8 dB	10.75 GHz	+/- 10PPM	950 - 1450 MHz	55 dB min	+15 to +24 VDC	F
USLBPIFF82	12.25 - 12.75 GHz	0.8 dB	11.3 GHz	+/- 3PPM	950 - 1450 MHz	55 dB min	+15 to +24 VDC	F
USLBPINF82	12.25 - 12.75 GHz	0.8 dB	11.3 GHz	+/- 3PPM	950 - 1450 MHz	55 dB min	+15 to +24 VDC	N
USLBPIFF92	12.25 - 12.75 GHz	0.8 dB	11.3 GHz	+/- 10PPM	950 - 1450 MHz	55 dB min	+15 to +24 VDC	F

Note: All units have input waveguide WR-75

PART NUMBER GUIDE

Example To order Ku-Band LNB USLBPXF201:

USLBPXF201

Type	Freq Band	Source Type	Connector	IF Frequency		Stability	Noise Figure
B – BUC	A – Ka	DO – DRO	F – F Type	0 – 950 – 1450 MHz	C – 950 – 1450 MHz,	0 – Ext Ref	0 – 0.2 dB 14
L – LNB	B – Ku	PX – PLL Ext	N – N Type	1 – 950 – 1525 MHz	LO 10.50 GHz	A – ± 0.5MHz	6 – 0.8 dB 59
	C – C	Ref		2 – 950 – 1700 MHz	D – 950 – 1450 MHz,	B – ± 0.9MHz	7 – 0.9 dB 67
	D – Ext Ku	PI – PLL Intt		3 – 950 – 1750 MHz	LO 10.75 GHz	C – ± 1.5MHz	8 – 1.0 dB 75
	E – Ext C	Ref		4 – 960 – 1260 MHz	E – 950 – 1450 MHz,		9 – 1.1 dB 84
				5 – 1150 – 1450 MHz	LO 11.25 GHz		10 – 1.2 dB 92
				A – 950 – 1450 MHz,	F – 950 – 1450 MHz,		11 – 1.3 dB 101
				LO 10.00 GHz	LO 11.30 GHz		
				B – 950 – 1450 MHz,			
				LO 10.25 GHz			
						1 – ± 1ppm ± 5kHz	
						2 – ± 2ppm ± 10kHz	
						3 – ± 3ppm ± 15kHz	
						4 – ± 5ppm ± 25kHz	
						5 – ± 10ppm ± 50kHz	
						6 – ± 0.5ppm Ku ± 25kHz	
						7 – ± 1ppm Ku ± 10kHz	
						8 – ± 3ppm Ku ± 25kHz	
						9 – ± 10ppm Ku ± 100kHz	

US Monolithics LLC
 ODU Sales
 6155 El Camino Real
 Carlsbad, CA 92009

Tel: 760.795.6422
 Email: odusales@usmonolithics.com
www.usmonolithics.com/odu

