

C LNB 3.40-4.80 GHz 1 Band

Key features



- Internal filters
- Low phase noise to meet DVB-S2X VSAT profile
- High P1dB and IP 3
- Choose between Internal Reference or External 10 MHz reference models
- Wide operating temperature range

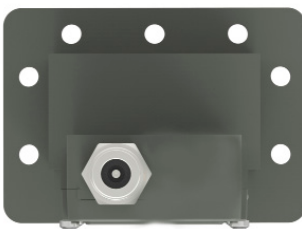
Description

Swedish Microwaves Single Band C-Band PLL LNB has a design with integrated filters providing isolation from interfering signals like 5G & WiMAX.

The Low Phase Noise is compliant to the DVB-S2X standard.

Options: Customized LO, lower gain and variation, Separate DC input connector (only SMA-type), Separate 10 MHz ref. input connector (only SMA-type).

Standard connector

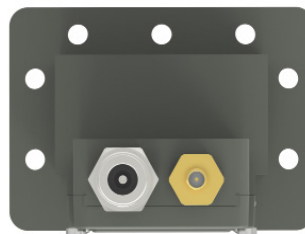


A

Connector A (standard)

Type: N-female (option F or SMA female)
Functions: L-Band out, DC in, 10 MHz ref. input

Optional connector



B

Connector B (optional)

Type: SMA female only
Functions: DC input or 10 MHz ref. input

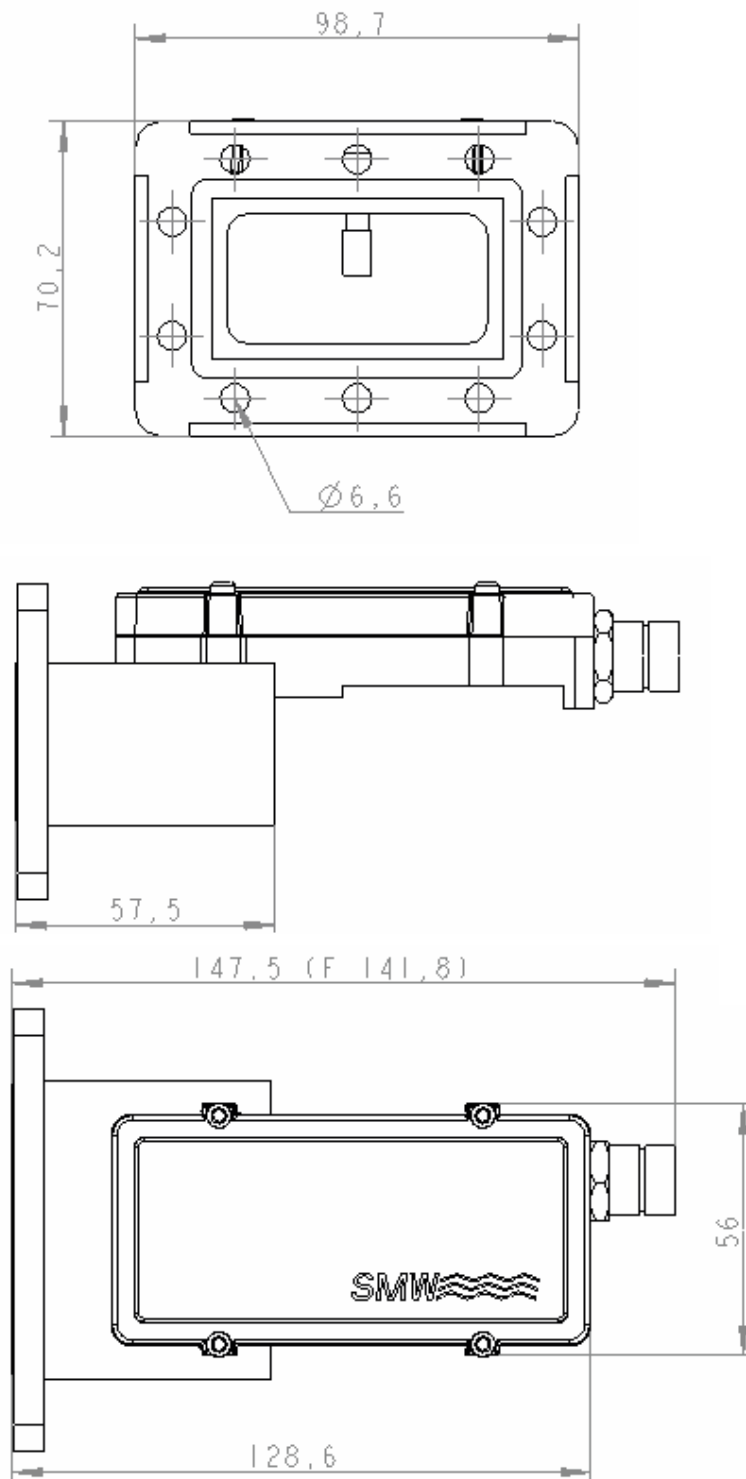
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Technical specifications

	Name	Input Frequency	LO Frequency	Output Frequency	Flatness (full band)
MODEL	5.15 S	3.625–4.200 GHz	5.15 GHz	1525 - 950 MHz	± 2 dB
	5.15 E	3.400–4.200 GHz	5.15 GHz	1750 - 950 MHz	± 2 dB
	5.15 B	3.700–4.200 GHz	5.15 GHz	1450 - 950 MHz	± 2 dB
	5.30 C	3.800–4.200 GHz	5.30 GHz	1500 - 1100 MHz	± 2 dB
	5.75 W	3.600–4.800 GHz	5.75 GHz	2150 - 950 MHz	± 3 dB
	5.75 W (Extended)	3.400–4.800 GHz	5.75 GHz	2350 - 950 MHz	± 3 dB
	5.75 U	4.500–4.800 GHz	5.75 GHz	1250 - 950 MHz	± 2 dB
	5.95 U	4.500–4.800 GHz	5.95 GHz	1450 - 1150 MHz	± 2 dB
INPUT	Input WG	Waveguide WR229 / R40, CPR 229G flange			
	Input VSWR	2.5:1 max.			
	Input max power	0 dBm instantaneous (not continuous)			
	DC Input	+12 to +18 V, 430 mA typ. Supplied through output connector.			
	LO Leakage	-60 dBm max. @ waveguide input, -40 dBm max. @ IF output			
INTERNAL	Gain	60 dB typ. (55 dB min.)			
	Gain variation over 24h	±0.1 dB @ 23°C			
	Noise figure	0.69 dB / 50 K typ.			
	MODELS with Internal reference	±0.5 ppm -20 to +70°C (±1 ppm -40 to +80°C), ±1 ppm -20 to +70°C (±1.5 ppm -40 to +80°C)			
	MODELS with External reference	Sine Wave, Level: -15 to +5 dBm. Supplied through output connector (with no ext. 10 MHz ref. present LO shifts -20 ppm).			
	Phase Noise	-62dBc/Hz • 100 Hz -80dBc/Hz • 1 kHz -88dBc/Hz • 10 kHz -95dBc/Hz • 100kHz -112Bc/Hz • ≥1 MHz (typ.)			
	Phase Noise 5.75 W	-62dBc/Hz • 100 Hz -80dBc/Hz • 1 kHz -83dBc/Hz • 10 kHz -95dBc/Hz • 100kHz -112Bc/Hz • ≥1 MHz (typ.)			
	Group Delay	± 1ns max.			
	Out of band rejection	20 dB min.			
	Image Rejection	40 dB min.			
OUTPUT	Output P1dB	+15 dBm typ.			
	Output IP3	+25 dBm typ.			
	Output VSWR	2.1:1 max.			
	Output Connector	F-type 75Ω, N-type 50Ω or SMA-type 50Ω			
GENERAL	Temperature range	Storage and operating: -40 to +80°C			
	MTBF	MTBF as per MIL-HDBK-217F Notice 2: Environmental Condition GF (Ground Fixed): >489000 hours, Environmental Condition A1C (Airborne, Inhabited, Cargo): >245000 hours, Quality level: Commercial, Temp used for MTBF calculation: +35 C Ambient			
	Dimensions	142 x 99 x 70 mm (F- & SMA-connector), 148 x 99 x 70 mm (N-connector), for drawing, see www.smw.se			
	Weight	380 g (F- & SMA-connector) 396 g (N-connector)			
	Miscellaneous	Enclosed conductive O-ring, mounting screws M6 x 25, washers and nuts 10 pcs.			

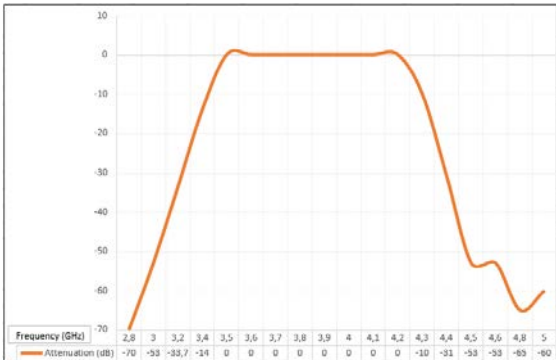
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Technical Drawing

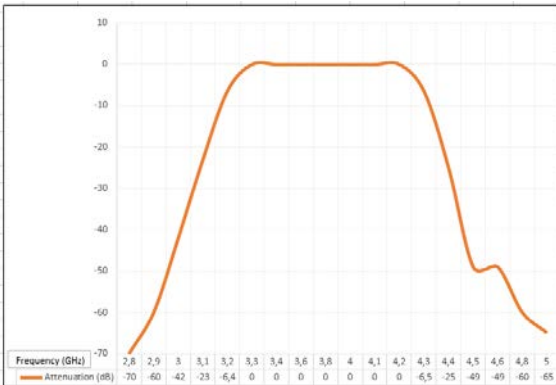


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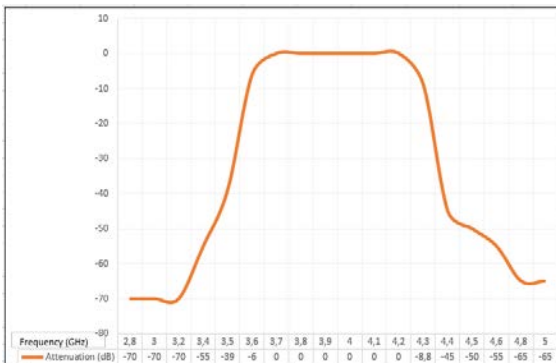
Internal RF filters



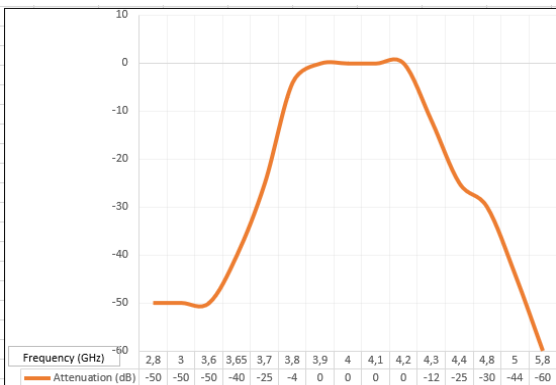
Filter characteristics for model 5.15 S
3.625 - 4.200 GHz



Filter characteristics for model 5.15 E
3.400 - 4.200 GHz



Filter characteristics for model 5.15 B
3.700 - 4.200 GHz



Filter characteristics for model 5.30 C
3.800 - 4.200 GHz



SMW authorized distributor

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