

Ku Dual Band Block Upconverter (BUC) 12.75 - 13.25GHz, 13.75 – 14.5GHz

LW30-797804

TYPICAL APPLICATIONS

- SSPA/TWTA Power Amplifier systems
- Multi band Ku systems
- Can be used in conjunction with Linwave power amplifiers

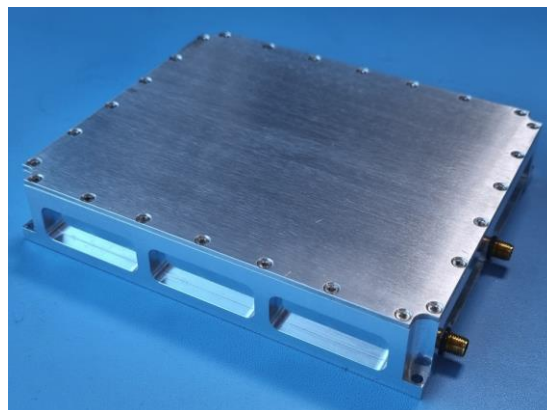
PRODUCT FEATURES

- IESS 308 compliant
- Adjustable gain
- Temperature compensated
- Lock detect output
- Automatic internal/external reference detection and switching
- Integral high performance output filtering

GENERAL DESCRIPTION

The LW30-797804 is a high performance dual band BUC designed for use with external power amplifiers or integration into customers' systems. The design allows for flexibility in the customers' requirements with a number additional features being available.

Extended temperature range and harsh environment models are also available. Please contact factory for alternative connector and frequency options.



ELECTRICAL CHARACTERISTICS - Operational $T_A = 25\text{ }^\circ\text{C}$, 50 Ω System (unless otherwise noted)

PARAMETER	MIN	TYP	MAX	UNITS
RF Output Frequency (Low band)	12.75		13.25	GHz
IF Input frequency (Low band)	950		1450	MHz
RF Output Frequency (High band)	13.75		14.5	GHz
IF Input frequency (High band)	950		1700	MHz
Small signal gain	-2	0	+2	dB
Output power (P_{1dB})	0			dBm
Third Order Intercept Point	+10			dBm
Input Return Loss		13		dB
Output Return Loss		14		dB
Noise Figure			18	dB
Gain Flatness (full band)	-1		+1	dB
Spurious Outputs (Signal related in band)		-60		dBc
Spurious Outputs (LO leakage)		-45		dBm
Frequency reference (internal or external on L band input)		10		MHz

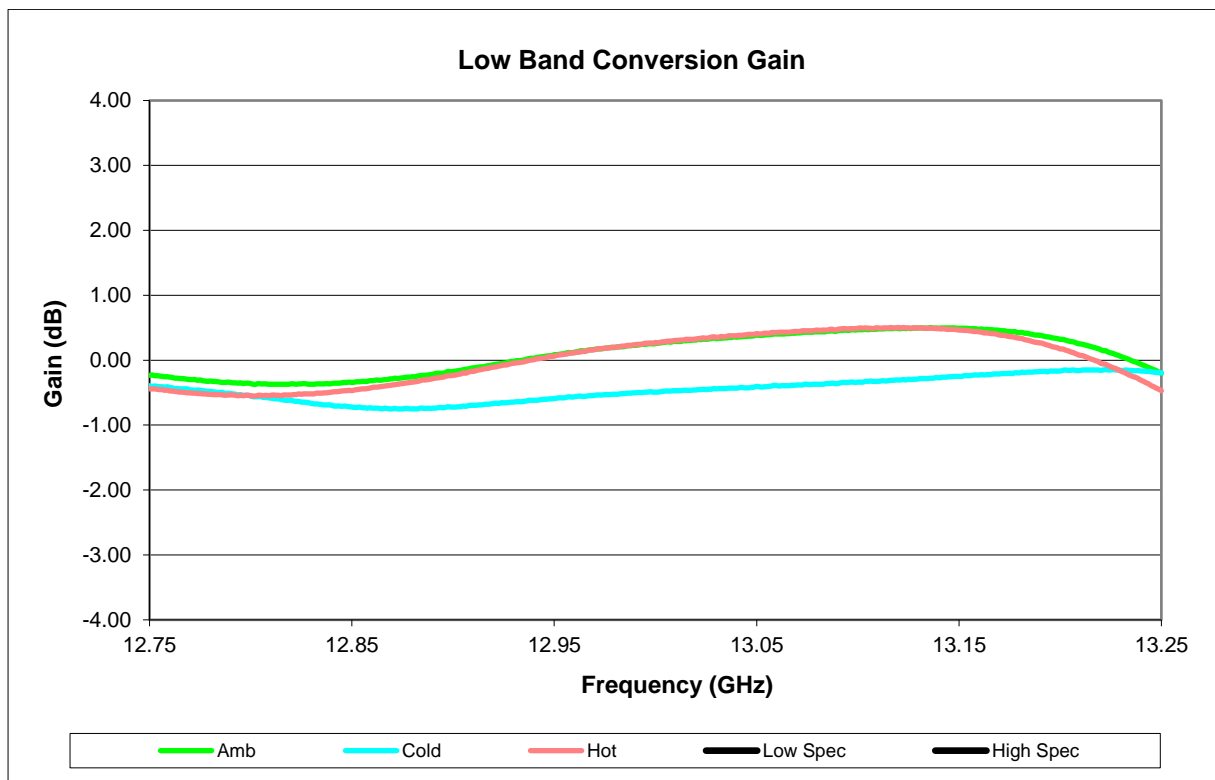
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PARAMETER	MIN	TYP	MAX	UNITS
Phase Noise 100Hz offset from carrier			-61	dBc/Hz
1kHz offset from carrier			-71	dBc/Hz
10kHz offset from carrier			-81	dBc/Hz
100kHz offset from carrier			-91	dBc/Hz
1MHz offset from carrier			-91	dBc/Hz
Power Consumption +15V			1000	mA
Operating temperature range	-20		60	°C
Storage temperature range	-40		85	°C

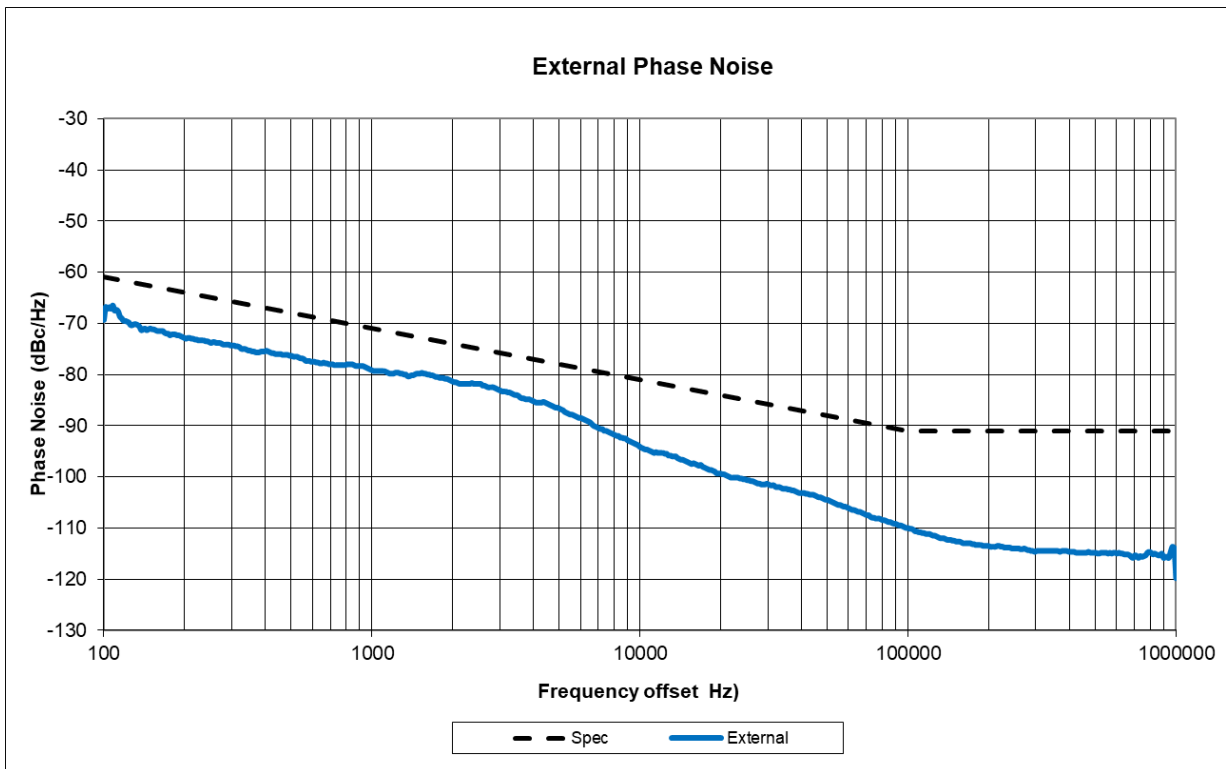
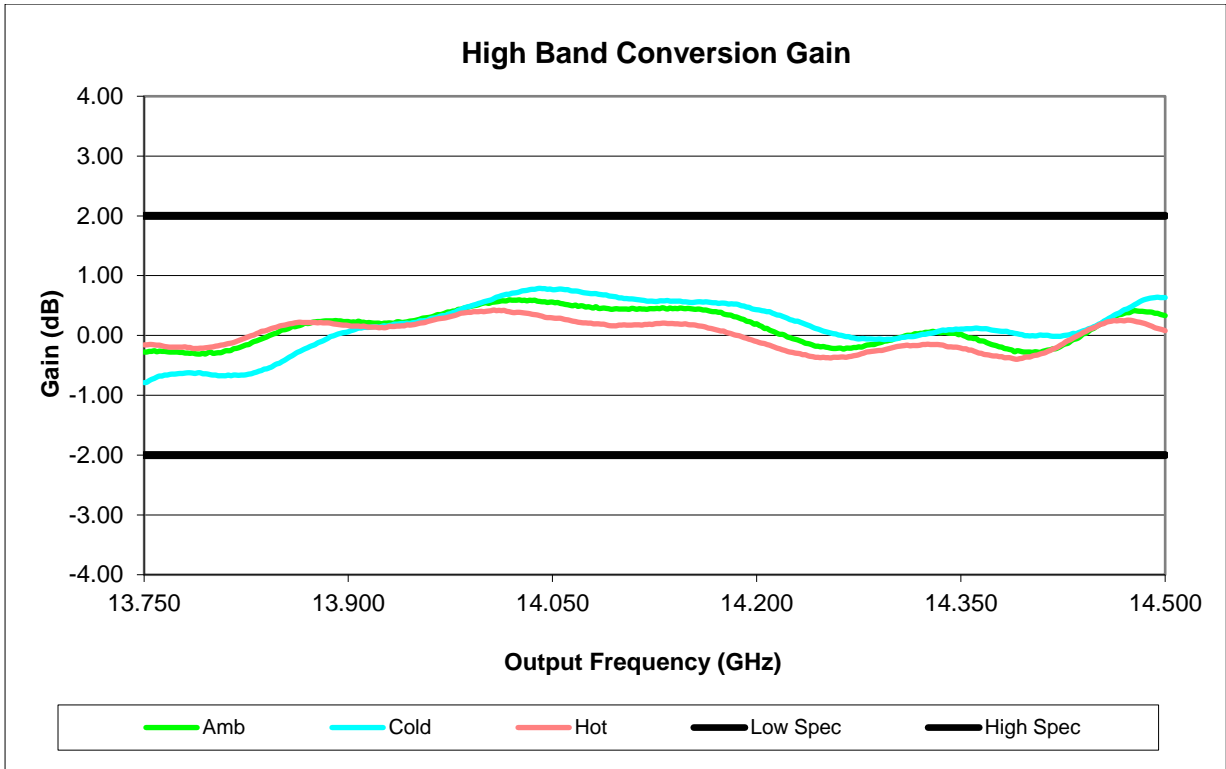
MECHANICAL CHARACTERISTICS

PARAMETER	VALUE	UNITS
Dimensions (max)	135 x 82.5 x 27 (L x W x H) Mounting holes, 4 x \varnothing 3.2mm through	mm
Weight (max)	700	g
IF/RF connectors	SMA female	-
Control/Power connector	9 pin D plug (male)	-
Cooling	Conduction cooled	-

PERFORMANCE DATA

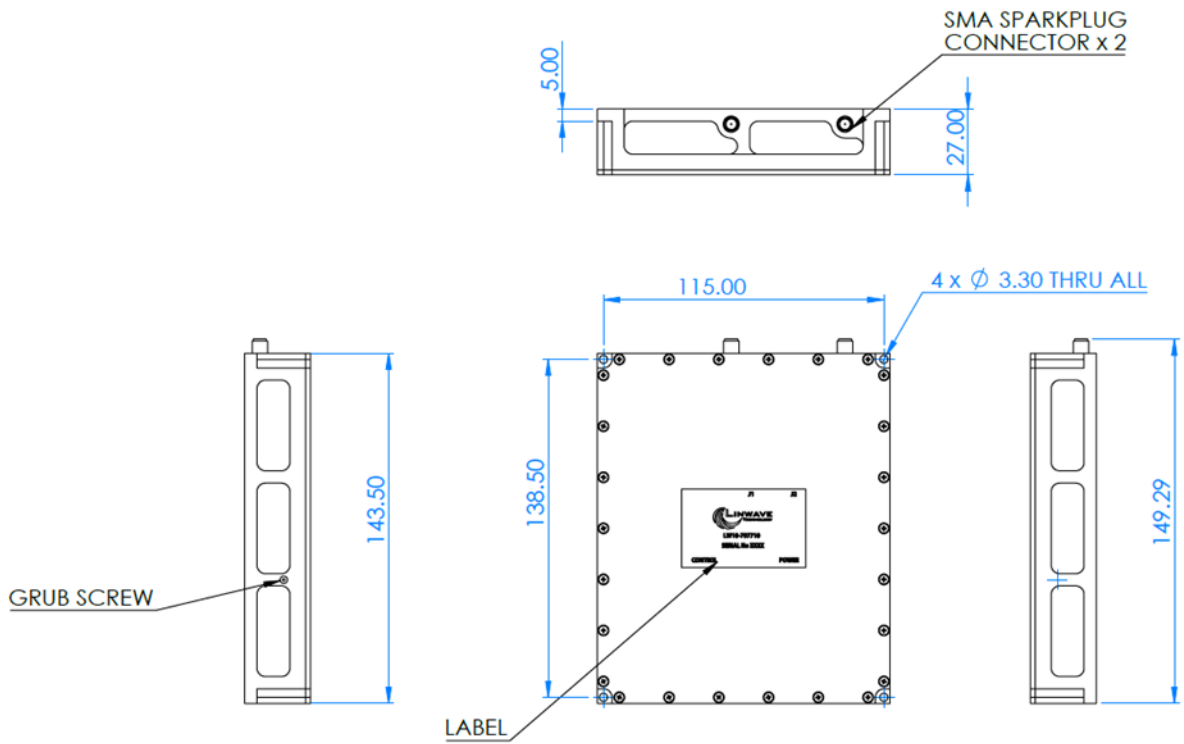


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MECHANICAL OUTLINE



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