BMCD19

DUAL CHANNEL LOW NOISE DOWN-CONVERTER

- **VERY LOW PHASE NOISE**
- **LOW INTERMODULATION DISTORSION**
- **LOW POWER CONSUMPTION**
- **HIGH RELIABILITY**

This down converter is intended for use in professional applications such as satellite earth stations. It has extremely low phase noise properties, making it possible to receive very weak signals close down to the thermal noise floor. Due to the weatherproof sealing, it can be used effectively in harsh environmental conditions.

Electrical characteristics:

Input characteristics	
Input frequency range	10.9 – 11.7 GHz
Impedance	50 ohm
Return loss	> 15 dB
Local Leakage	-80 dBm typ. (-70 dBm max.)
Input connector	N female
Output characteristics	
Frequency	950 –1750 MHz
Impedance	50 ohm
Return loss	> 15 dB
Power output (1dB compression)	> +10 dBm typical
Output connector	N female
Local leakage	-80 dBm typ. (-70 dBm max.)
Attenuation between outputs	> 80 dB
Transfer characteristics	
Conversion gain	35 dB, nominal
Gain adjustment	20 dB with 1 dB steps
Gain flatness	± 1 dB (in full band), ± 0.5 dB (in any 40 MHz band)
Gain stability	± 0.5 dB (0 to 50 °C)
Noise figure	< 10 dB, typ. 8 dB
Image rejection	> 70 dB
Attenuatin from input to output	> 80 dB
Spurious signal related	-75 dBc
signal independent	-80 dBm @ Gmax.
Attenuation between channels	-80 dB (from inputs to other output)
Intermodulation distortion (IP3)	> 18 dBm @ 0 dB atten
Group delay	7 nsec @ 40 MHz BW, 3 nsec @ 5 MHz BW
Typical phase noise	-80 dBc @100 Hz
	-100 dBc @ 1 kHz
	-115 dBc @ 10 kHz
	-120 dBc @ 100 kHz

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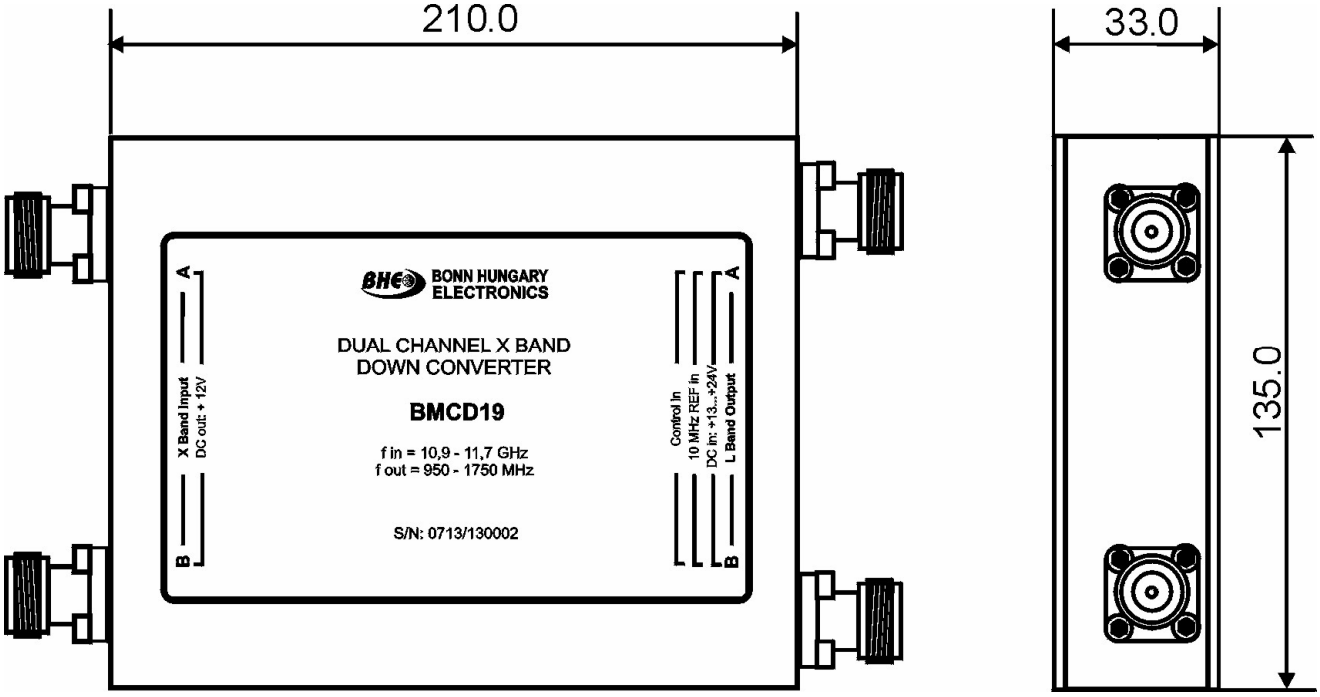
Electrical characteristics:

Internal reference	
Frequency Accuracy	± 1 ppm
Frequency Stability	± 2 ppm
External Reference	10 MHz, automatic change-over
Reference Input	via L band output
Input Impedance @ 10 MHz	50 ohm
Return Loss @ 10 MHz	> 18 dB
Input Reference Level	- 10 to + 10 dBm
Control	
Remote	via L band output
Input Impedance	50 ohm
Return Loss @ 315MHz +/-5 MHz	> 15 dB
Control frequencies	314 MHz (A channel) & 316MHz (B channel)
Input Power (via L band output)	+13 to +24 V DC / cca.800 mA@+15V
Operating Temperature	-40 to 70 °C

Outline dimensions (mm):



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