

BLOCK DOWN CONVERTERS

Tampa Microwave block down converters are specifically designed to translate either C, X, Ku or Ka Band to L-Band output frequencies. These block down converters have the quality and stability required for demanding receiver applications.



FEATURES

- L Band Input
- C, X, Ku and Ka Inputs
- Low Phase Noise
- 50 MHz reference

OPTIONS

- Input Filtering
- Optional Conversion Gain
- Custom Configurations
- External Reference
- Extended Temperature Range -40° to +85° C
- Internal Crystal Reference, stability < 0.1 ppm
- Rack Mount

STANDARD PHASE-LOCKED BLOCK DOWN CONVERTERS

Table 1

PART NUMBER *	INPUT FREQ.	OUTPUT FREQ.	INPUT CONN.	OUTPUT CONN.
BDC-5150 **	3.4 to 4.2 GHz	950 to 1750 MHz	"N" Female	"N" Female
BDC-6300	7.25 to 7.75 GHz	950 to 1450 MHz	"SMA" Female	"SMA" Female
BDC-10000	10.95 to 11.70 GHz	950 to 1700 MHz	"SMA" Female	"SMA" Female
BDC-10750	11.70 to 12.75 GHz	950 to 2000 MHz	"SMA" Female	"SMA" Female
BDC-11300	12.25 to 12.75 GHz	950 to 1450 MHz	"SMA" Female	"SMA" Female
BDC-13050	14.00 to 14.50 GHz	950 to 1450 MHz	"SMA" Female	"SMA" Female

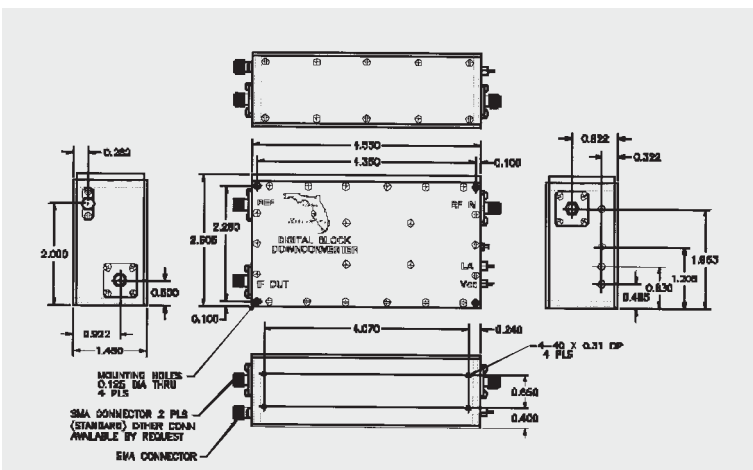
*The TML part number indicates the LO frequency in MHz. BDC-"LOFREQ".

** This BDC inverts the frequency spectrum of the input.

SPECIFICATIONS

FUNCTIONAL	
Input Frequency	See Table 1
Output Frequency	See Table 1
LO Frequency Stability	+/- 2 ppm
LO Phase Noise	-75 dBc @ 1KHz offset -85 dBc @ 10 KHz offset -95 dBc @ 100 KHz offset
LO to IF Leakage	-20 dBm typ
LO to RF Leakage	-20 dBm max.
Noise Figure	10 dB max.
Mid Band Conversion Gain Min.	18 dB
Mid Band Conversion Gain Max.	22 dB
Conversion Gain Flatness Over Freq.	+/-1 dB max.
Gain Flatness per 40 MHz	+/- .5 dB max.
Mid Band Gain Stability vs Temp	+/-1 dB max.
1dB Compression Point (output)	3 dBm min.
3rd Order Intercept (output)	+13 dBm min.
Image Rejection	20 dB min.
Internal Spurious Non Sig Rel	-85 dBm within IF output band
Sig Rel	-65 dBc within IF output band
Input/Output VSWR 50 Ohms	1.8:1 max.
POWER REQUIREMENTS	
Voltage	15 to 18 VDC
Power Consumption	500 mA max. via filter feedthrough or IF connector
PHYSICAL	
Weight	25 ounces nom.
Size	2.61 x 4.55 x 1.45 inches
Input Connector	See Table 1
Output Connector	See Table 1
Lock Alarm Connector	Open drain when locked (optional TTL Level)
Ground Connector	Solder turret
ENVIRONMENTAL	
Temperature Range	-40 to + 50 deg. C

Standard Housing



OTHER TAMPA MICROWAVE PRODUCTS

Loop Test Translators, Rack-Mount Block Up Converters and Block Down Converters, Satellite Simulators, Hot Swappable Converters and Transmitters.

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