

HIGH PERFORMANCE X-BAND LOW NOISE BLOCK DOWNCONVERTERS

RF SPECIFICATIONS

Frequency input.....	7.25–7.75 GHz
Frequency output	950–1450 MHz
Nondamage power input	+10 dBm maximum
Amplitude response.....	±0.5 dB/±40 MHz, ±1.5 dB/500 MHz maximum
Output (1 dB compression point)	+10 dBm minimum
Intermodulation distortion (third order)	With two 0 dBm outputs, 40 dBc maximum
Spurious	
Signal related.....	-65 dBc maximum up to 0 dBm output
Signal independent.....	-60 dBm inband maximum
LO leakage at RF input	-80 dBm maximum
Image rejection.....	80 dB minimum
VSWR	
Input.....	1.25:1 maximum
Output	2:1 maximum

POWER AND FREQUENCY REFERENCE ON OUTPUT CENTER CONDUCTOR REQUIREMENTS

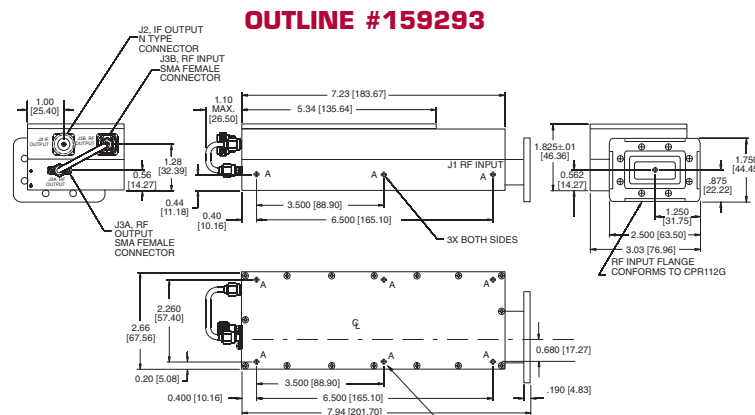
Voltage	12 to 20 VDC
Current consumption	550 mA typical, 700 mA maximum
Reference	
Frequency.....	10 MHz
Level	0 ±5 dBm

PHYSICAL

Weight	3 pounds (1.4 kg) typical
Waveguide pressurization	At 2 PSI, leak rate 10cm ³ /minute maximum

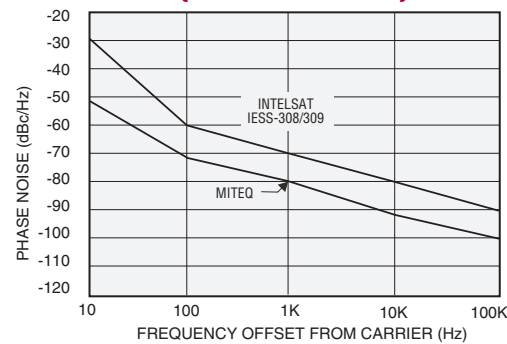
ENVIRONMENTAL

Operating	
Temperature.....	-40 to +60°C
Atmospheric pressure.....	Up to 10,000 feet
Nonoperating	
Temperature.....	-50 to +70°C
Atmospheric pressure.....	Up to 40,000 feet
Shock and vibration.....	Normal handling by commercial carriers

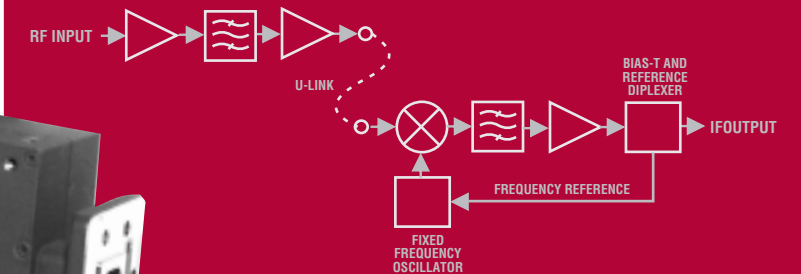
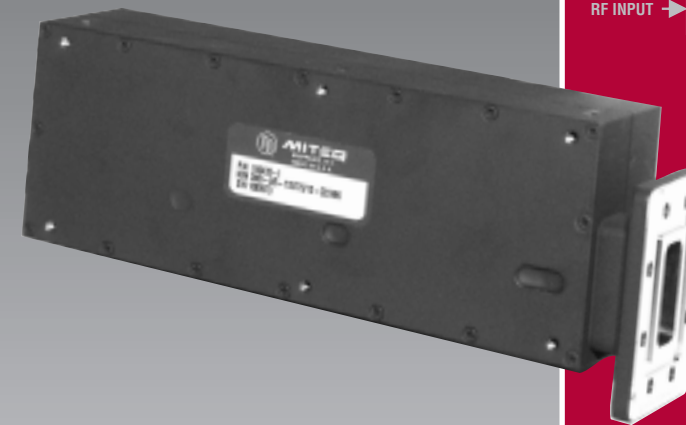


NOTES:
1. METRIC EQUIVALENTS ARE SHOWN IN BRACKETS.

MAXIMUM PHASE NOISE CHARACTERISTICS (1.0 Hz BANDWIDTH)



HIGH PERFORMANCE X-BAND LOW NOISE BLOCK DOWNCONVERTER WITH INTERSTAGE FILTER



This series of X-band low noise block downconverters (LNB) are designed to be used in outdoor antenna mounted applications. Every consideration has been given to provide excellent RF characteristics with reliable performance.

An integrated interstage filter provides exceptional transmit desensitivity performance while providing a low noise temperature.

FEATURES

- Low noise temperature
- Excellent input VSWR
- 10 Pole interstage filter
- Frequency reference and DC power on RF output center conductor

OPTIONS

- Higher gain
- Higher noise temperature

Model Number	Gain (Min. – Max.)	Noise Temperature (Max.)	Transmit Desensitivity (Max.)
DB-WS-725775-50/50	50–56 dB	50K at 23°C	-20 dBm
DB-WS-725775-60/50	60–66 dB	50K at 23°C	-30 dBm
DB-WS-725775-50/70	50–56 dB	70K at 23°C	-20 dBm
DB-WS-725775-60/70	60–66 dB	70K at 23°C	-30 dBm



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