

BRQ001

Triples Down Converter Assembly

The BRQ001 Triples Down Converter accepts inputs in the 6 to 18GHz band, incorporates a 3-channel filter, each channel being 4GHz wide, and individually down converts those channels to a 2 to 6GHz IF output.

The compact lightweight package is low powered and ruggedized for use in harsh environments over extended temperature ranges and high shock/vibration.

Applications

- Block down converter
- EW receivers

Key Features

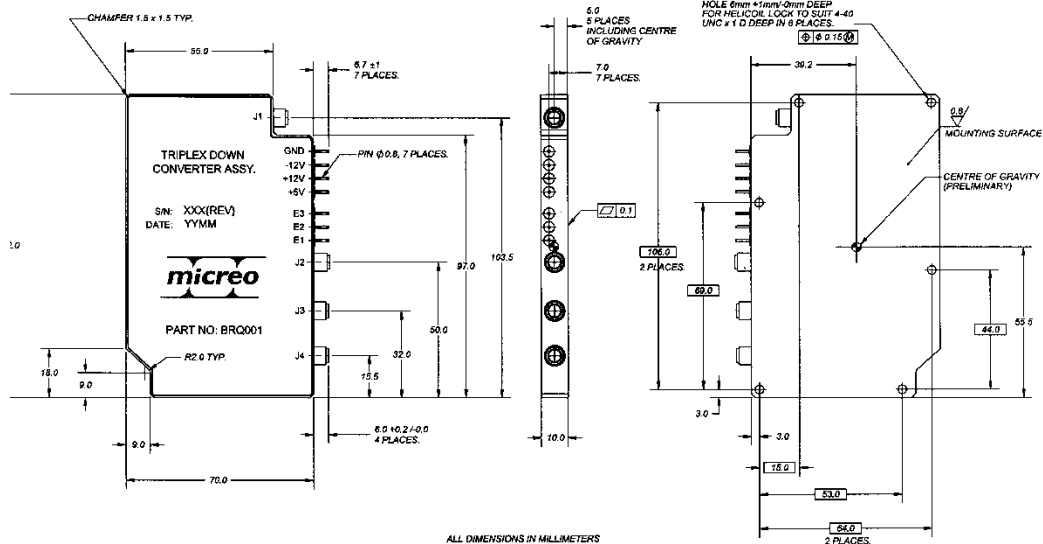
- Full 6-18GHz coverage in three bands
- High level of integration
- Amplifiers, switched filter and down converter in a single, compact package
- State-of-the-art MMIC amplifier and SSS filter technology
- Integral filter provides high isolation, rejection, low group delay and rapid roll-off

Specifications

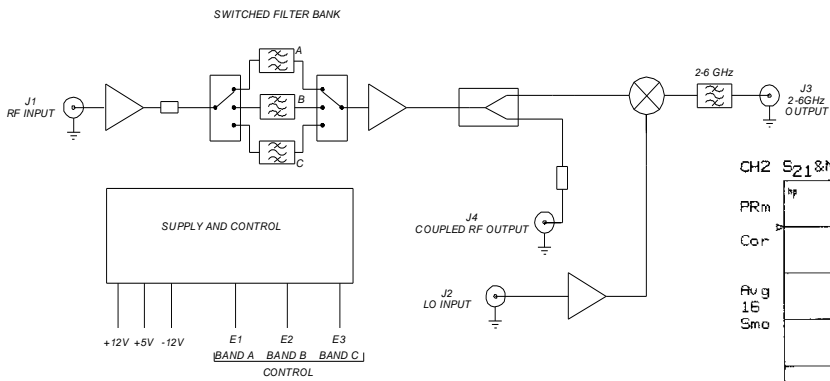
Input Frequency Range:	6-18GHz
Sub-band Filters:	
Band A	6-10GHz
Band B	10-14GHz
Band C	14-18GHz
Out-of-band Rejection:	60dBc minimum
Transmission Gain:	
J1 to J3:	10dB ±2dB
J1 to J4:	12dB minimum
Conversion Gain:	12dB
In-band Ripple:	±1.5dB max, ±1dB typical
Gain Flatness	
Full 12 Ghz BW:	±2dB
Group Delay Variation:	1.2ns maximum
Input P1dB:	-16dBm minimum
Noise Figure:	6dB maximum
IF Frequency Range:	2-6GHz
LO Frequency:	12GHz Bands A & C 16GHz Band B
LO Power:	+13 to +16dBm
Input VSWR:	1.8:1 maximum
Output VSWR:	2.1:1 maximum
Spurious Output at P _{1dB} :	27dBc minimum triplex
Power Supply:	
+ 5V ±5%:	450mA
- 12V ±5%:	30mA
+12V ±5%:	60mA
Control Signals:	TTL levels, active high
Operating & Storage Temperature:	-54°C to +95°C base plate
Humidity:	95% condensing
Vibration:	17.5gRMS 10-2000Hz random
Shock:	30g, 11 milliseconds, half-sine pulse
Dimensions:	See drawing
Weight:	220g maximum



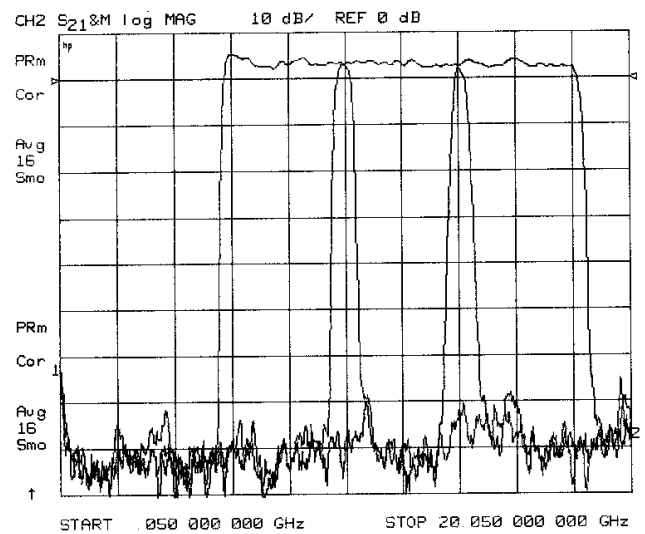
Micreo
one step ahead



Unit Outline



Block Diagram



Typical Performance



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Ordering information:

592-BRQ001

Triplic Down Converter Assembly

Please contact us for more information.

L3 Micreo reserves the right to amend specifications in the light of continuing development.
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