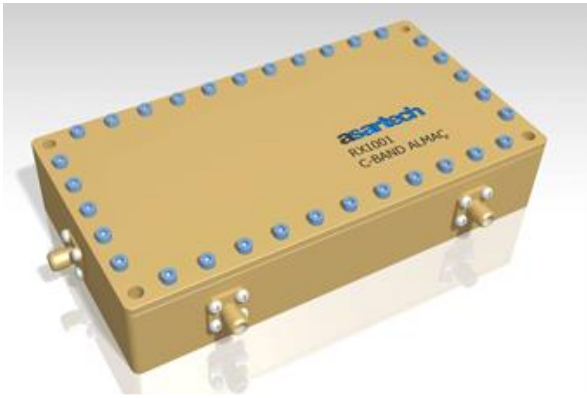


RX1001



C-BAND RECEIVER



DESCRIPTION

RX1001 is a 2-stage frequency downconverter designed to work in C-band. RF input frequency band lies within 5-6GHz and can be customized for the customer. IF output frequency is normally centered at 240MHz and can be similarly customized. IF bandwidth is limited to 60MHz.

Equipped with filtered and low noise LDO regulators, and highly selective filters, harmonic and spurious output are suppressed below -60dBc.

IF output is limited to +10dBm for ADC applications. It can be removed at factory if desired.

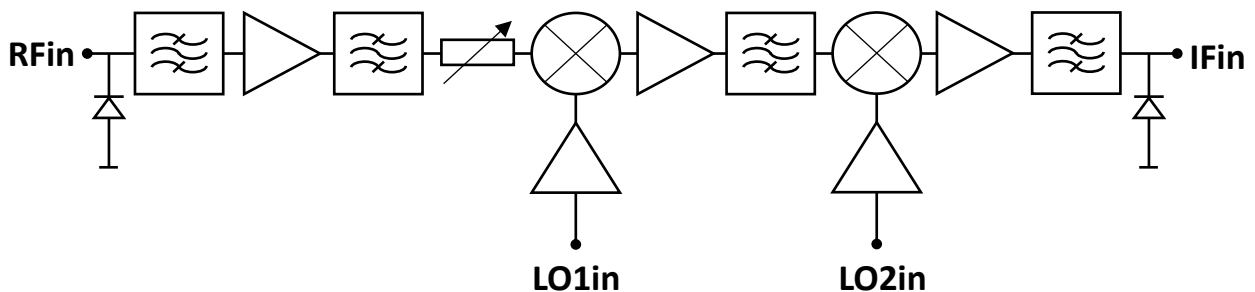
FEATURES

- RF power limiting at input and output
- High Side LO1 and LO2 mixing
- Selective SAW Filtering

SPECS AT A GLANCE

- 5-6 GHz RF input
- 240 MHz IF output
- 70dB SFDR typ (1MHz BW)
- 4dB NF typ

BLOCK DIAGRAM

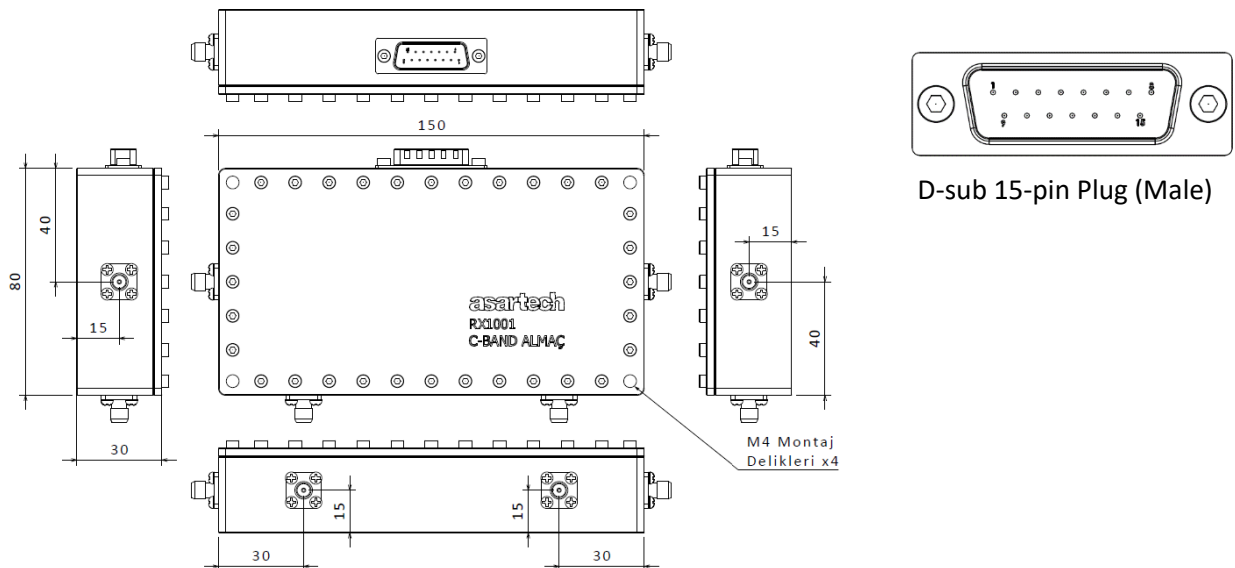


SPECIFICATIONS

Parameter	Limit	Notes
RF Input Band	5-6 GHz	Actual freq band specified upon order
IF Output Band	210-270 MHz	
RF-IF Gain	40dB typ	
RF Output P1dB	9dBm	Can be customized within 7 to 13dBm
RF Output Power	-30dBm typ +10dBm max	10% duty
Noise Figure	4dB typ	
SFDR	70dB typ	
LO Frequencies	--	LO frequencies available upon order
LO Input Power	0dBm \pm 2dB	LO1 and LO2
IF Output Spuri	-60dBc max	At IF output
Out of Band Signal Suppression	-80dBm max	Measured IF output for 0dBm input at 200MHz away from RF input band corners
RF-IF Gain Adjust	31dB typ	
RF-IF Gain Adjustment Steps	1dB	
RF-IF Gain Control	5-bit, 0/5V	
Gain Adjustment Settling	200ns max	From 50% VCTRL to %90 RF
DC Power Consumption	4W max	
Operational Temp Range	5°C to 65°C	Note 1
Storage Temp Range	0°C to 125°C	Note 1

Note 1: It is assumed that the device will sit within a rack unit inside a conditioned cabinet. Consult factory for conditions otherwise.

MECHANICAL



Designed and Manufactured in TÜRKİYE

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IMPORTANT

- Specifications subject to change without further notice.
- Data given in this document provides its typical performance. Actual device performance is guaranteed by specifications called out by “customer-specific” part number and the associated acceptance test procedure.