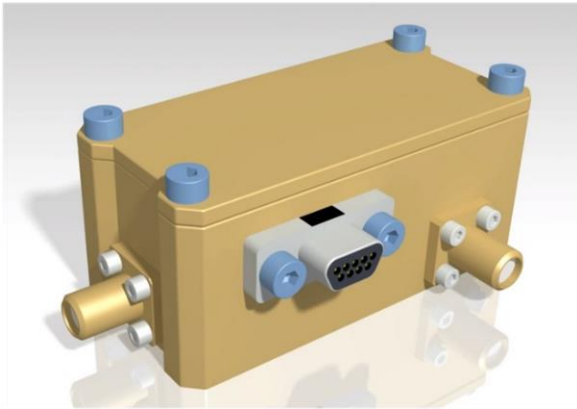


# MC1001



## WIDEBAND DOWNCONVERTER



### DESCRIPTION

MC1001 is wideband downconverter for wideband receiver applications.

The RF to IF signal chain contains IF amplification and digitally controlled attenuator for gain control.

IF output ranges from 0.4 to 2.5GHz. For fixed frequency narrowband applications, the IF output can be externally filtered to reduce the noise output.

Device consumes 1.5W typically.

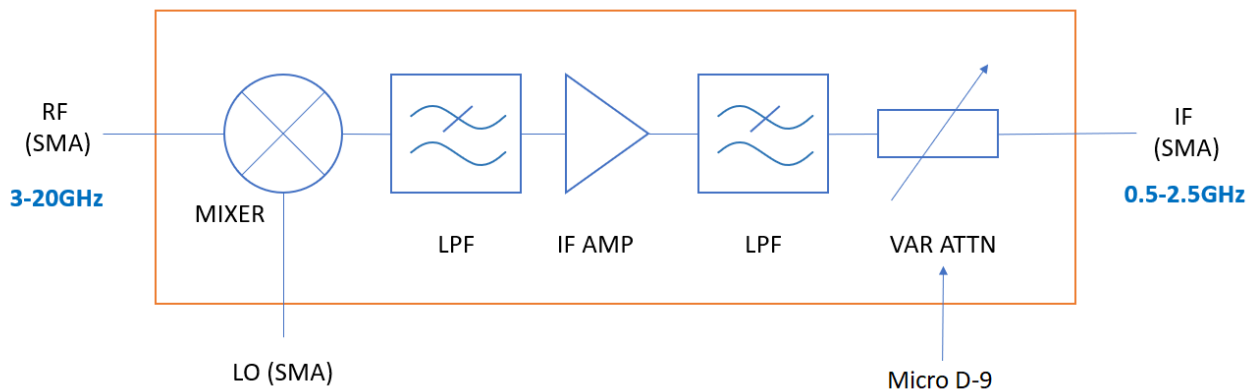
### FEATURES

- Adjustable Conversion Gain
- Suitable for high speed ADCs

### SPECS AT A GLANCE

- 3-20 GHz RF Input
- 0.5-19.5GHz LO Input
- 0.4-2.5GHz IF Output
- 10dB Noise Figure

### BLOCK DIAGRAM

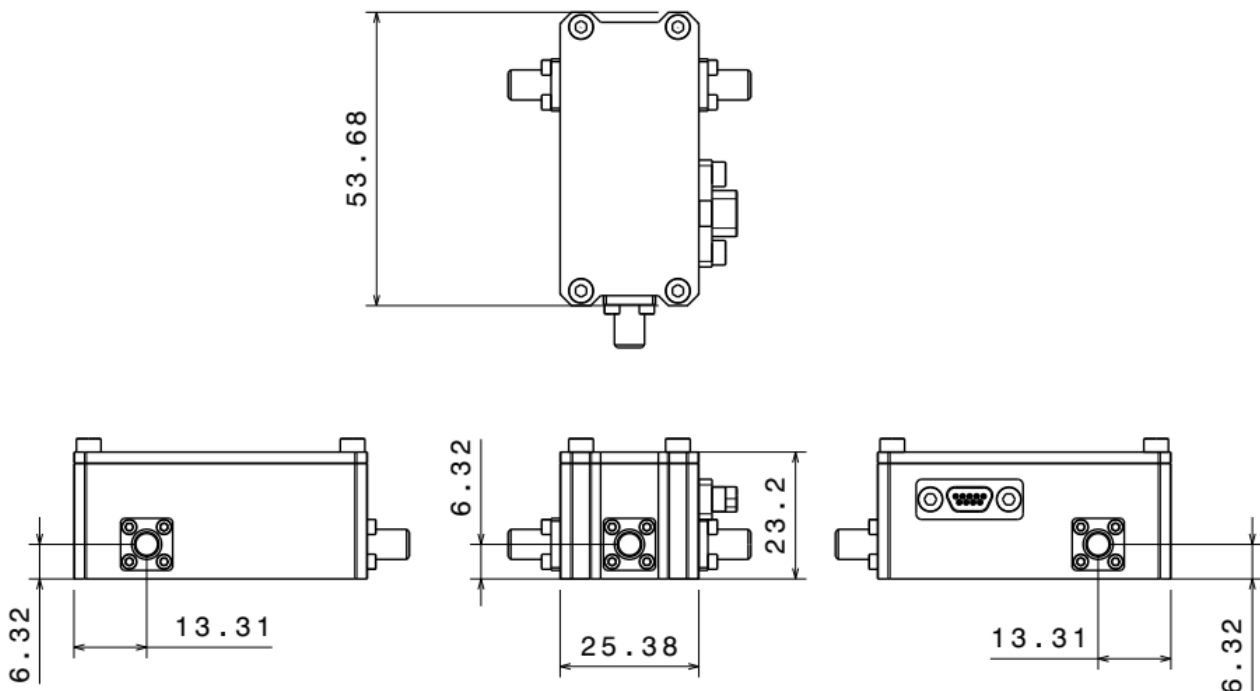


## SPECIFICATIONS

Parameter	Limit
RF Frequency	3 to 20 GHz
IF Frequency	0.5 to 2.5 GHz
LO Frequency	0.5 to 19.5 GHz
Conversion Gain	-27.5 to +5dB with 0.5dB steps
Image Rejection	45dBc min
LO/RF Isolation	50dB typ
Noise Figure	10dB max
Input P1dB	10dBm min @ 10GHz typ
DC Power Consumption	1.5W typ
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 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.