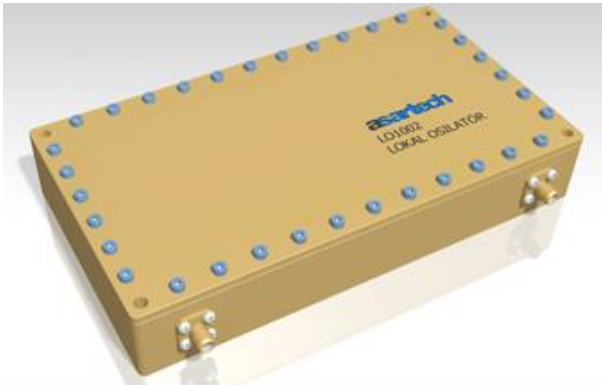




LO1002

2-CHANNEL DUAL BAND LOCAL OSCILLATOR



DESCRIPTION

LO1002 is a 2-channel dual band local oscillator for use with frequency converters. LO1 is a fast frequency variable oscillator whereas LO2 is a fixed oscillator. Frequency ranges can be customized to specifications within specified ranges.

LO1002 features fast PLLs with LO1 settling in 150ns which allow fast frequency hopping. Device incorporates very low noise voltage-controlled oscillators (VCOs), with LO1 reaching -135dBc/Hz and LO2 reaching -145dBc/Hz at 1MHz offset.

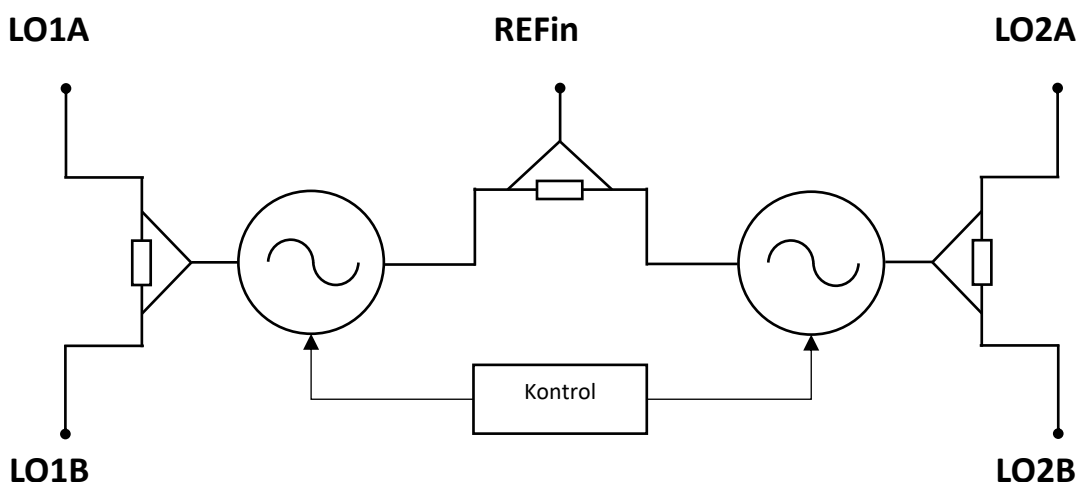
FEATURES

- Ultra-Low Phase Noise Oscillators
- 150ns LO1 frequency switching time
- Fast Phase Locked Loops (PLLs) locked to a single frequency reference
- Both LOs amplitude and phase matched for A and B outputs

SPECS AT A GLANCE

- 6.5 – 8.0 GHz LO1 output
- 1.6 – 2.0 GHz LO2 output
- -60dBc spurious and harmonics

BLOCK DIAGRAM

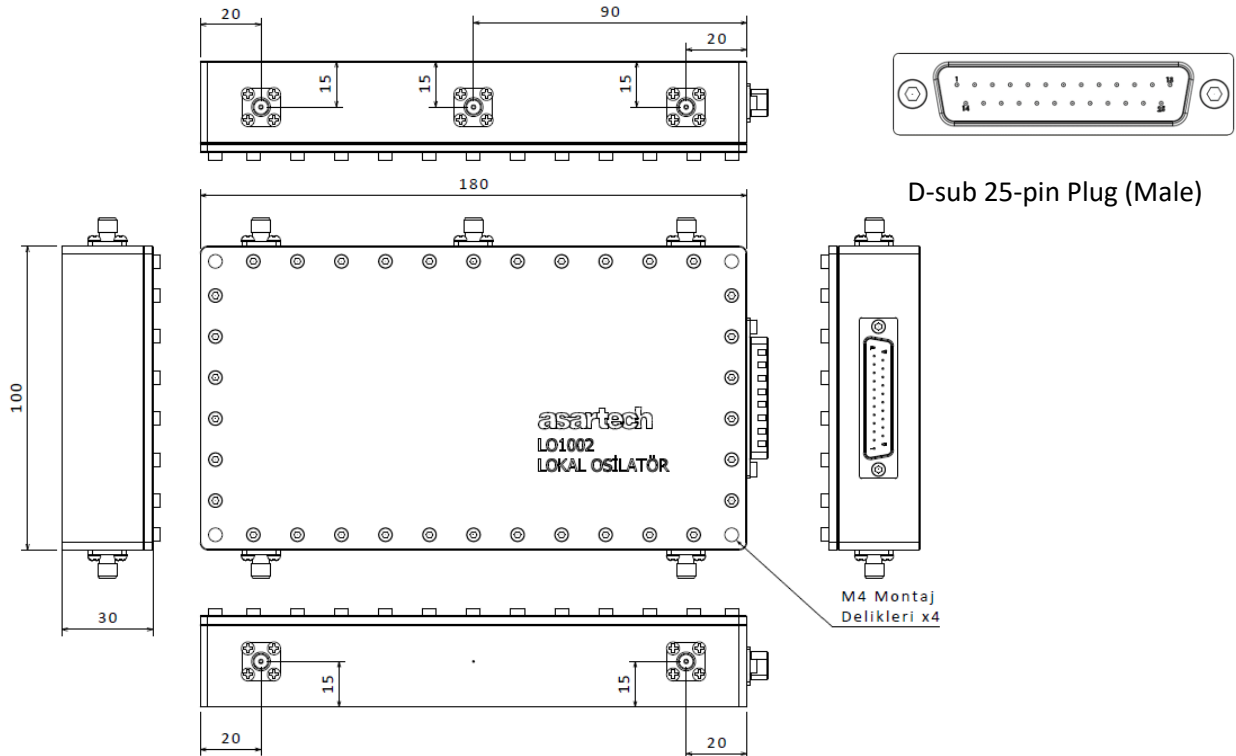


SPECIFICATIONS

Parameter	Limit
LO1 Frequency Range	6.5 – 8.0GHz
LO2 Frequency Range	1.6 – 2.0GHz
LO1 Frequency Steps	10MHz minimum
LO1 Frequency Settling Time	150ns typ
LO1 Frequency Selection	5-bit TTL
LO1 Phase Noise	-100dBc/Hz @ 10kHz -135dBc/Hz @ 1MHz
LO2 Phase Noise	-110dBc/Hz @ 10kHz -145dBc/Hz @ 1MHz
LO1 Output Level	3dBm \pm 3dB
LO2 Output Level	3dBm \pm 2dB
REF Input Frequency	100MHz
REF Input Level	0dBm \pm 2dB
DC Power Consumption	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 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.