

IQ Mixer

RF:6-26 GHz/LO:6-26 GHz/IF:DC-6 GHz

Model: TLIQ-0626-06-K

TLIQ-0626-06-K is an ultra-broadband mixer spanning 6 to 26 GHz on the RF and LO ports with an IF from DC to 6 GHz. Up to 32 dBc of image rejection is available due to the excellent phase and amplitude balance of its on-chip LO quadrature hybrid.

Features:

- RF/LO coverage : 6-12 GHz
- IF operation : DC-6 GHz
- Conversion loss: 15dB Typ
- LO power : 19dBm Typ
- Image Rejection : 32dBc Typ

Applications:

- Single Sideband and Image Rejection Mixing
- IQ Modulation / Demodulation
- Vector Amplitude Modulation
- Band Shifting

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
RF Frequency	6		26	GHz
LO Frequency	6		26	GHz
LO-Input power	13	19	23	dBm
IF Frequency	DC		6	GHz
Image Rejection @RF/LO:6-26GHz,I+Q:DC-0.2GHz		32		dBc
Conversion Loss @RF/LO:6-26GHz,I/Q:DC-6GHz		15		dB
Input 1 dB Gain Compression Point		10		dBm
LO to IF Isolation		45		dB
LO to RF Isolation		35		dB
RF to IF Isolation		30		dB

Mechanical Specifications:

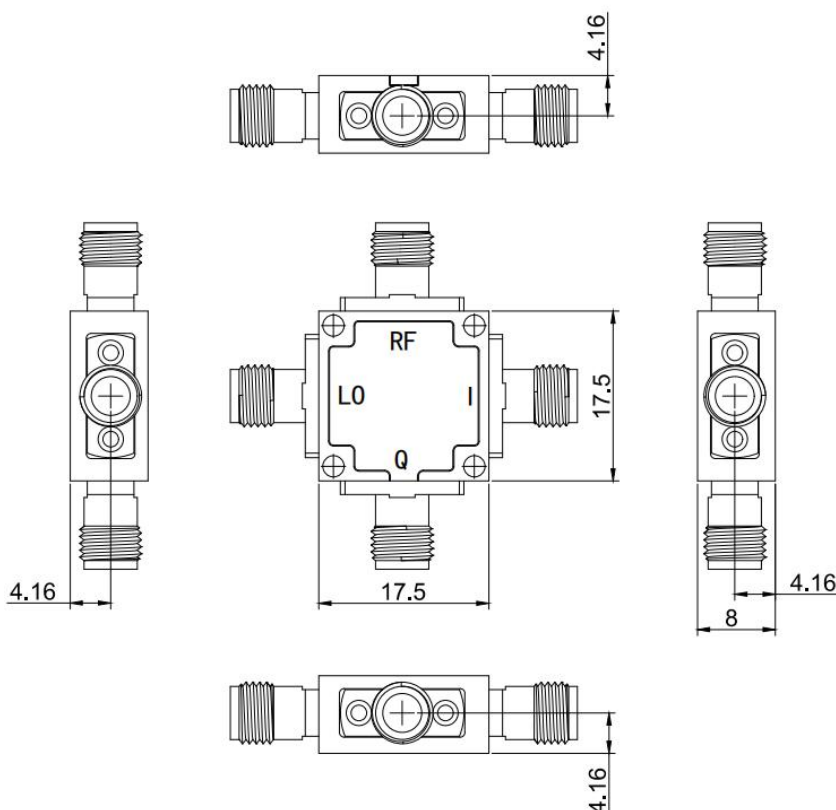
Parameter	Value	Units
RF Connector	2.92mm Female	
LO Connector	2.92mm Female	
IF Connector	SMA Female	
Size	17.5*17.5*8(Without Connector)	mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
Power Handling, at any Port	+25 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+100	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TLIQ-0626-06-K	Image Rejection or I/Q Mixer RF:6-26GHz,LO:6-26GHz,IF:DC-6GHz	Rev.1.1