泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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U-band Fundamental Mixer

RF:40-60 GHz/LO:10-15 GHz/IF:DC-20 GHz Model: TLAMCM-040060-20-19-L

TLAMCM-040060-20-19-L is a U-Band balance mixer. The mixer supports the full waveguide band operation for RF frequency from 40 to 60 GHz and LO frequency from 10 to 15 GHz with an extremely broad IF output from DC to 20 GHz. The mixer offers a conversion loss of -10 dB typical and LO input power of 0 dBm typical.

Features:

- Low LO Power Requirement
- Subharmonic Mixing
- Compact Package

Applications:

- Radar Systems
- Communication Systems
- Test Equipment

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
RF Frequency	40		60	GHz
4XLO Frequency	40		60	GHz
LO Frequency	10		15	GHz
IF Frequency	DC		20	GHz
LO-Input power	-3	0	8	dBm
LO Multiplier factor		4		
Conversion Loss(IF=100MHz)		-10		dB
IF Input P1dB		0		dBm
RF Input P1dB		0		dBm
DC Supply Voltage		5		V DC
DC Supply Current		350		mA

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Mechanical Specifications:

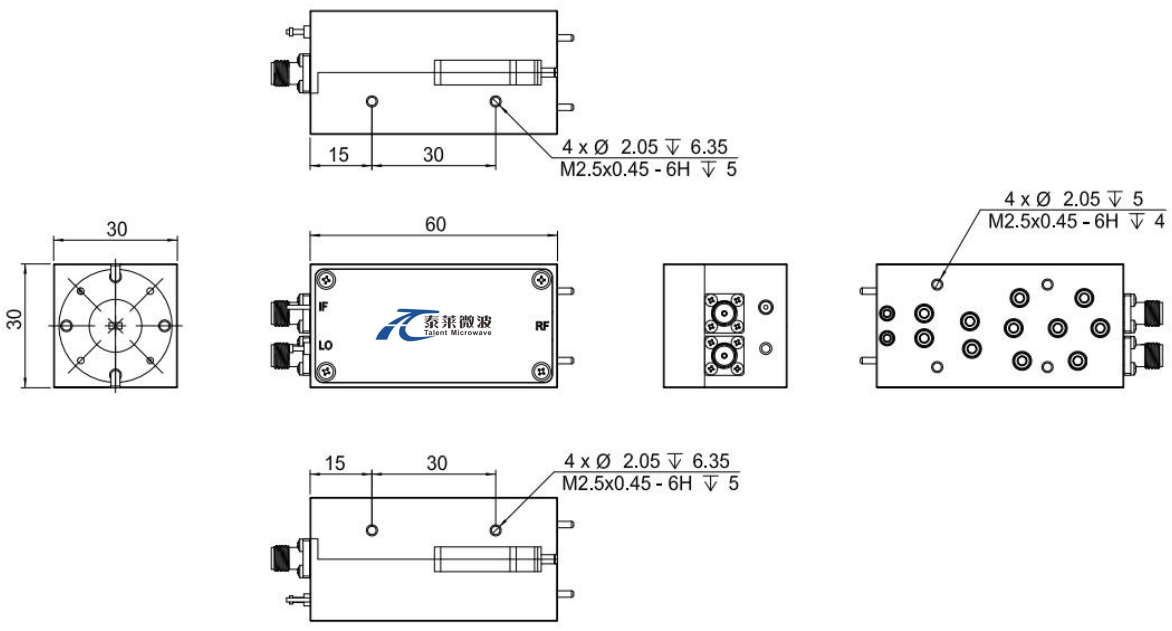
Parameter	Value	Units
RF Connector	WR-19/UG-383/U	
LO Connector	SMA Female	
IF Connector	SMA Female	
Size	60*30*30	mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	10 dBm
LO Input Power	10 dBm
IF Input Power	10 dBm
DC Supply Voltage	+9 V
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



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Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	0		+50	℃
Non-operating Temperature	-45		+85	℃
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	Desciption	Revision
TLAMCM-040060-20-19-L	U-band Fundamental Mixer RF:40-60GHz,LO:10-15GHz,IF:DC-20GHz	Rev.1.1