

V-band,Active Tx/Rx Converter

WR-15/50-75 GHz/-9dB Conversion Loss

Model: TLAMCM-050075-10-15

TLAMCM-050075-10-6 is an up and down fundamental mixer integrated with x6 active frequency multiplier chain. The converter has an input LO frequency of 8.25 to 12.5 GHz with an input power range from -3dB to +3dB. RF frequency can range from 50 to 75 GHz and IF port can range from DC to 10GHz with SMA connector. The DC power requirement for the multiplier is +12 V DC.

Features:

- RF Frequency:50-75GHz
- LO Frequency:8.25-12.5GHz
- IF Frequency:DC-10GHz
- Low Conversion Loss

Applications:

- Test Equipment
- Radar System
- V-band Imaging

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
RF Frequency	50		75	GHz
LO Frequency	8.25		12.5	GHz
IF Frequency	DC		10	GHz
LO-Input power	-3	0	+3	dBm
Conversion Loss(IF = 100MHz)		8		dB
Conversion Loss(LO = 12.5GHz)		9		dB
DC Supply Voltage		12		V
DC Supply Current		100		mA

Mechanical Specifications:

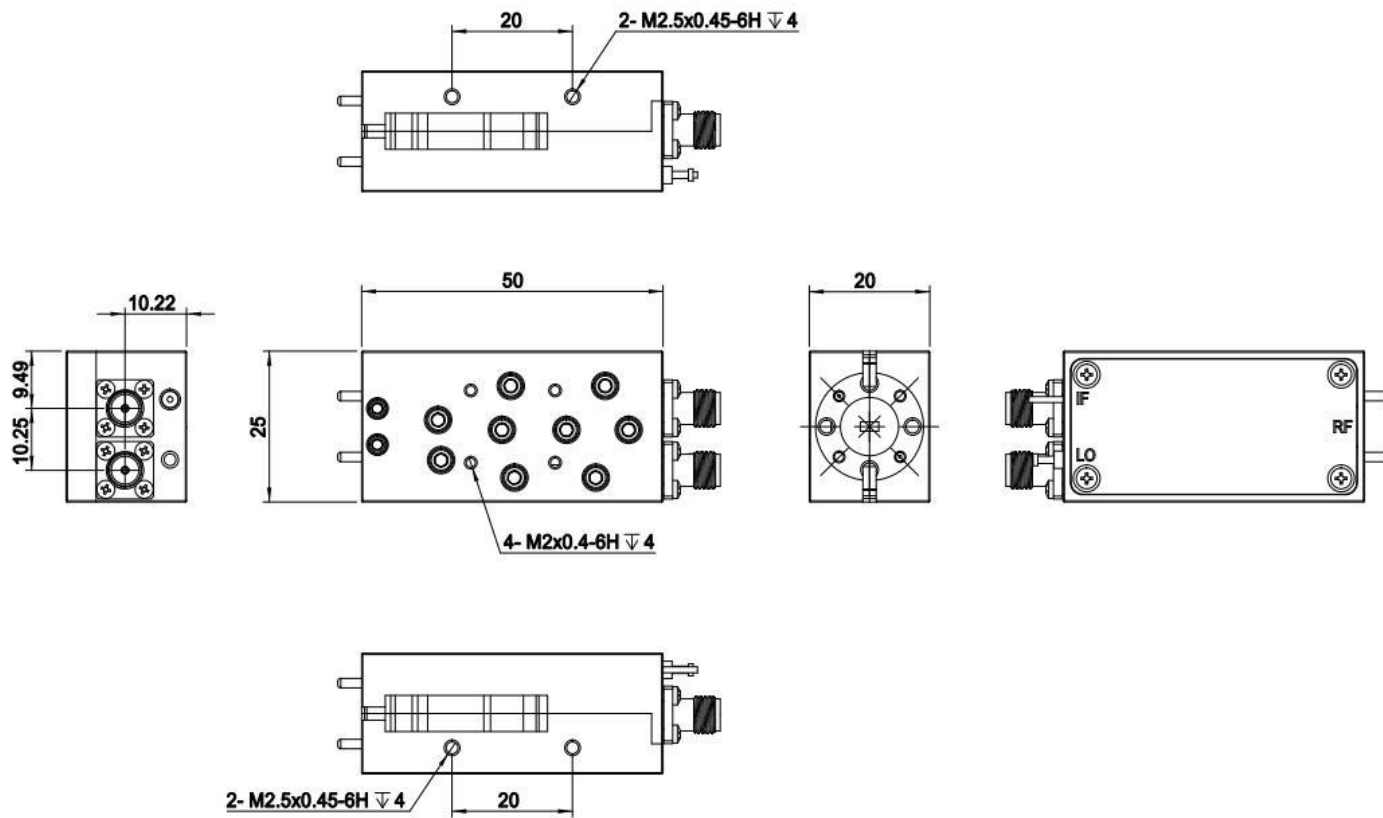
Parameter	Value	Units
RF Connector	WR-15/UG-385/U	
LO Connector	SMA Female	
IF Connector	SMA Female	
DC Supply	Solder Pin	
Size	50x25x20	mm

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	20 dBm
IF Input Power	20 dBm
LO Input Power	4 dBm
DC Supply Voltage	+15V
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	0		+50	°C
Non-operating Temperature	-45		+85	°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
TLAMCM-050075-10-15	V-band Active Tx/Rx Converter, Conversion Loss:-9dB,WR-15/UG 385/U	Rev.1.1