

**Model: TLHM-140220-16-05**
**Spectrum Analyzer Harmonic Mixer**  
**RF:140-220 GHz,IF:DC-1.5 GHz,16th**
**Feature:**

- Designed for Keysight PXA series and R&S FSW series
- Full Waveguide Band Operation
- Compact Package
- 3 port design
- 16th Harmonic Detection

**Electrical Specifications:**

Parameter	Min	Typ	Max	Units
RF Frequency	140		220	GHz
LO Frequency	8.75		13.75	GHz
IF Frequency	DC		1.5	GHz
LO-Input power		12		dBm
Input Power			0	dBm
RF Input VSWR		3.6		:1
SSB Conversion Loss		-40		dB

**Mechanical Specifications:**

Parameter	Value	Units
RF Connector	WR-05/UG-387	
LO Connector	SMA Female	
IF Connector	SMA Female	
Size	97*28*24	mm

**Absolute Maximum Ratings:**

Parameter	Value
RF Input Power	0dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Typical Performance Data:

Environmental Conditions:



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

Parameter	Min	Typ	Max	Units
Operating Temperature	0		+40	°C
Non-operating Temperature	-25		+65	°C
Relative humidity		95		%
Altitude	50,000			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:

Part Number	Description	Revision
TLHM-140220-16-05	Spectrum Analyzer Harmonic Mixer RF:140-220 GHz,IF:DC-1.5GHz,16th,3 port design	Rev.1.1