

140-170GHz IQ Mixer



Description:

AT-IQHM-140170 is an up and down mixer covering D band 140-170GHz. IF inputs with I+/I- Q+/Q- is IQ port and can range from DC to 6GHz. RF frequency range is 140-170GHz. The mixer inside is a 2rd harmonics with an active X6 Multiplier.

The mixer has high image rejection, low input/output return loss and flat conversion response. It's suitable for D band point to point communication, instrumentation, sensing, security and high resolution imaging applications.

For more information, please visit www.atmicrowave.com

Feature

- ✓ RF: 140-170GHz
- ✓ D Band Harmonic Mixer
- ✓ E Band X6 inside
- ✓ IF: DC-6GHz
- ✓ Low Conversion Loss
- ✓ Low LO power requirement

Application

- ✓ D band Imaging
- ✓ FOD (Foreigner Objects Debris)
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Electronical Specifications:

Parameter	Min	Typical	Max
RF		140-170 GHz	
LO		11.6-14.1 GHz	
LO Driver		+5 dBm	+10
D Band Sub-Harmonic		2th	
LO E Band Multiplier		X6	
IF Range		DC-6 GHz	
Conversion Loss		-15 dB	-18
P1dB		-5 dBm	
Imaging Rejection		-15 dBc	



IIP3		TBD	
12LO-RF Isolation		-20 dBc	
Power Supply		+5V/ 180mA	
RF Port		WR-06	
LO Port		SMA Female	
IF Port		SMA Female	

Absolute Maximum Ratings Table

Parameter	Value
IF Power	+7dBm
RF Port	+0dBm
LO Port	+10dBm
Operating Temperature	-40 to +85C
Storage Temperature	-65 to +150C

Dimension (mm)

