

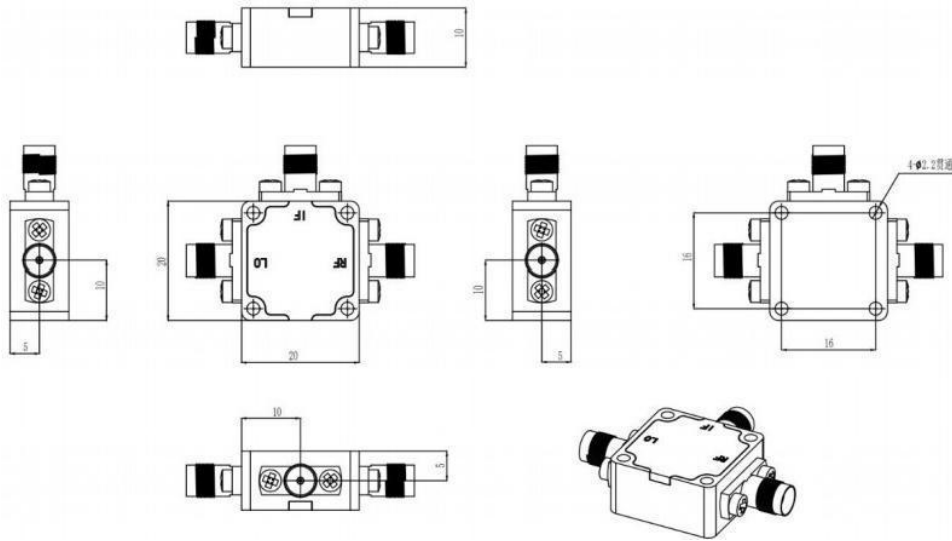
Frequency Mixer

MX-MIX0743-11

1. Technical Specifications(25°C)

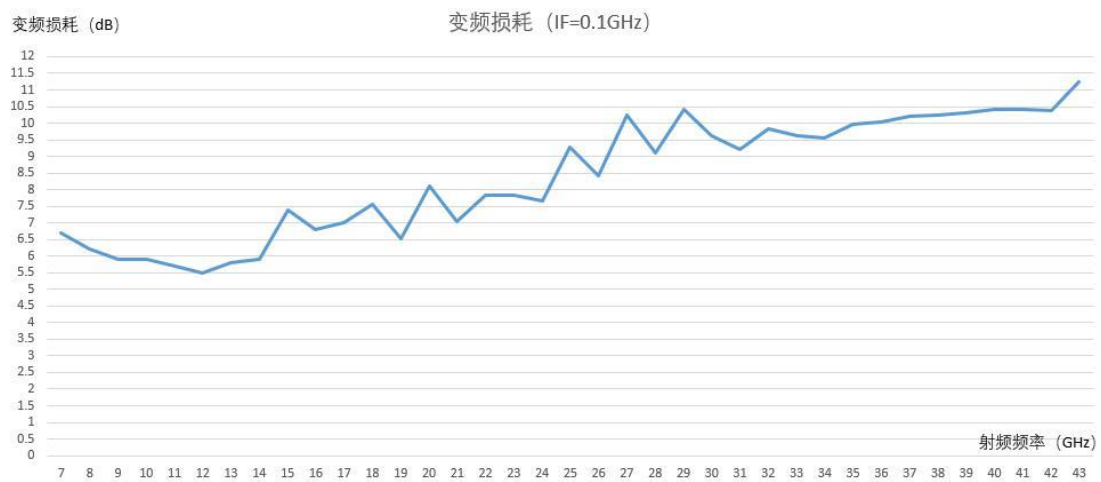
Parameter	Min.	Typ.	Max.	Unit
LO Input Frequency	7	-	43	GHz
LO Input Power	14	15	17	dBm
RF Frequency	7	-	43	GHz
IF Frequency	DC	-	11	GHz
Conversion Loss	-	9.5	-	dB
RF Input P-1dB	-	11	-	dBm
IIP3	-	21	-	dBm
LO-IF Isolation	-	25	-	dB
LO-RF Isolation	-	45	-	dB
RF-IF Isolation	-	25	-	dB
LO/RF Connector	-	2.92mm Female	-	-
IF Connector	-	SMA Female	-	-
Dimensions	-	20×20×10	-	mm

2.Outline Dimensions (Unit: mm)

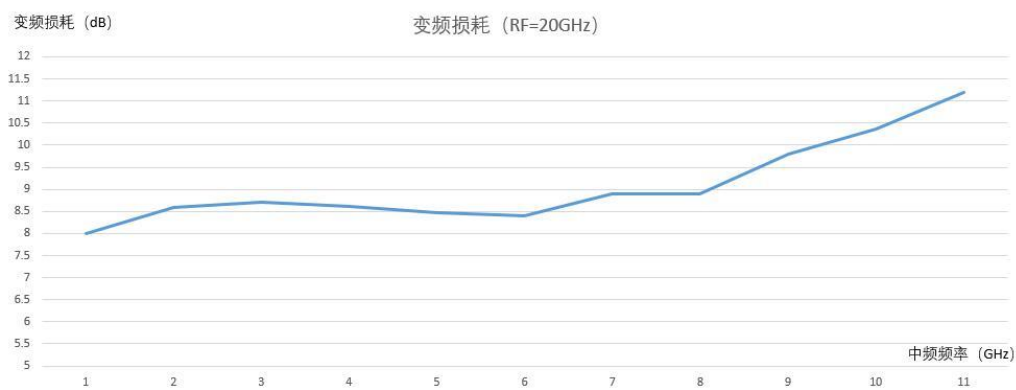


3.Test Curve

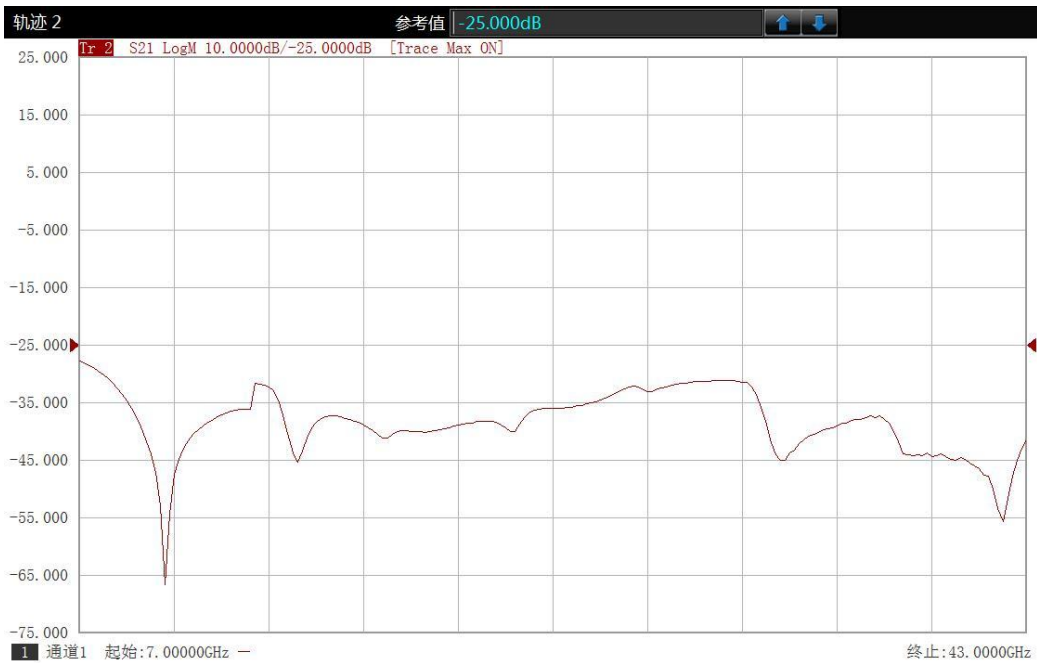
Fixed IF Conversion Loss Test



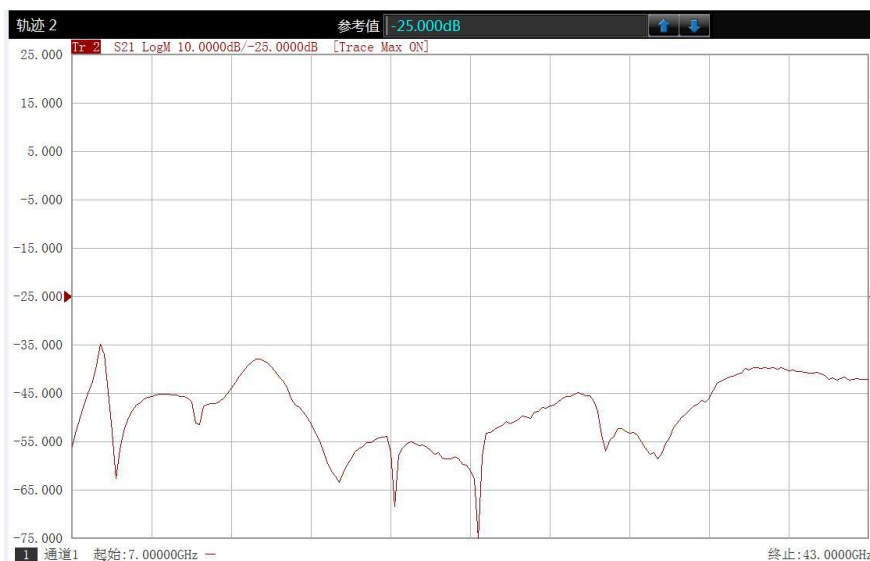
Fixed RF Conversion Loss Test



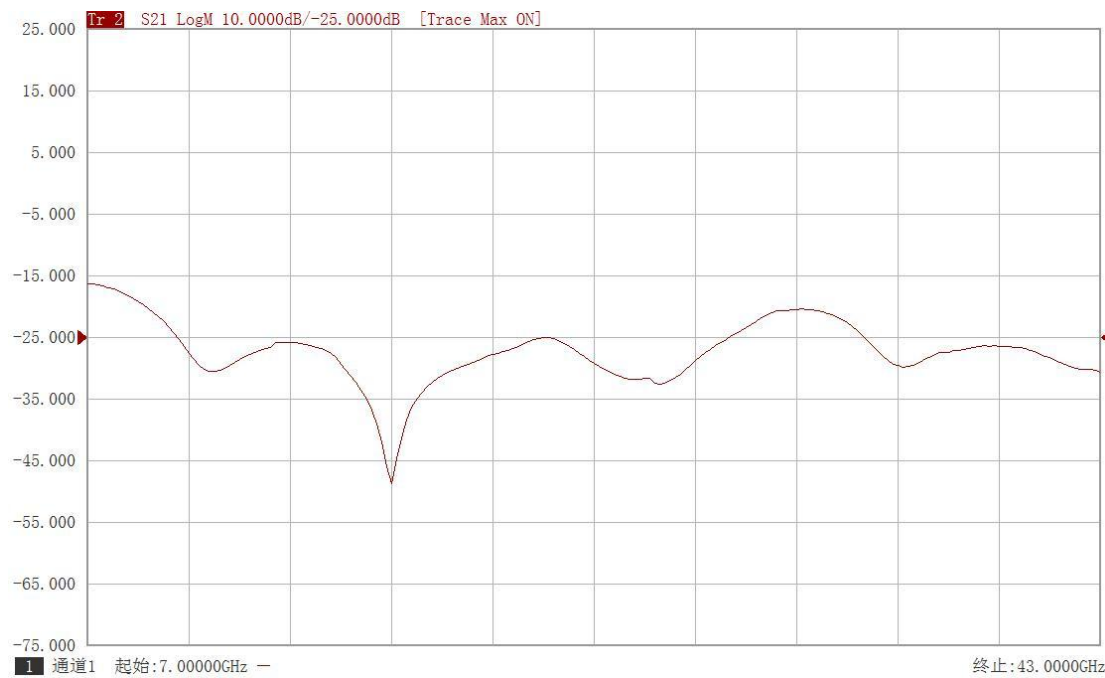
LO-IF Isolation



LO-RF Isolation



RF-IF Isolation



Instructions for Use

To ensure safe operation of the mixer module, users must carefully read and strictly comply with the following operating requirements:

The module housing must be securely mounted on a grounded metal baseplate or grounded metal frame to ensure reliable grounding and facilitate heat dissipation.

All RF ports must be properly connected to impedance-matched external components. If this cannot be guaranteed, it is recommended to add an isolator.

DC Voltage Protection for Ports: DC signals exceeding $\pm 16V$ are strictly prohibited from being applied to any port.

LO Port Power Protection: RF signals exceeding +20dBm in amplitude are strictly prohibited from being applied to the LO port.

Electrostatic Discharge (ESD):

The mixer module is an electrostatic-sensitive device (ESD-sensitive device). Always follow ESD protection rules during handling and operation.