



FEATURES

- Microwave from 0.1 to 45 GHz
- mmWave from 33 to 110 GHz (waveguide)
- +10 dBm nominal LO requirement
- Easy, automated measurements
- Single cable between receiver and mixer
- Low conversion loss
- Broadband (multi-octave)
- 45 GHz IF Frequency Range

DESCRIPTION

NSI-MI Technologies' Mixers provide RF to IF signal conversion for measurement by our Digital Receivers, an integral part of NSI-MI Technologies' Advanced Microwave Measurement System.

Mixer modules for use with NSI-MI's MI-750: The RF to IF conversion is accomplished by fundamental mixing up to 18 GHz and harmonic mixing for higher frequencies. This technique permits multi-octave frequency coverage with limited frequency range Local Oscillator (LO). Frequency diplexing in the MI-750 allows the LO and 45 MHz IF signals to be carried on the same cable connecting the mixer and receiver.

SPECIFICATIONS

Models	RF Frequency (GHz)	LO Frequency (GHz)	Harmonic	Conversion Loss (max., dB)	LO Power (nom., dBm)	RF Connector
MI-758-0.1-3.0	0.1 - 3	0.145 - 3.045	1st	9	10	N Male
MI-758-0.1-26.5	0.1 - 1	0.145 - 1.045	1st	17	10	K Female
	6 - 2	1.045 - 2.045	1st	16		
	2 - 18	2.045 - 18.045	1st	14		
	18 - 26.5	6.015 - 8.848	3rd	30		
MI-758-2.0-26.5	2 - 3	2.04 - 3.05	1st	14	10	N Female
	3 - 18	3.04 - 18.045	1st	9		
	6 - 26.5	6.01 - 13.348	3rd	25		
MI-758-2.0-40	2 - 18	2.04 - 18.05	1st	13	10	N Female
	18 - 40	6.01 - 13.35	3rd	24		
MI-758-33-50	33 - 50	11.01 - 16.68	3rd	35	10	WR-22
		8.26 - 12.51	4th	38		
MI-758-40-60	40 - 60	10.01 - 15.01	4th	40	12	WR-19
MI-758-50-75	50 - 75	12.51 - 18.76	4th	35	10	WR-15
		10.01 - 15.01	5th			
MI-758-60-90	60 - 90	12.01 - 18.01	5th	40	12	WR-12
MI-758-75-110	75 - 110	12.50 - 18.34	6th	40	7	WR-10

DIMENSIONS

Models	Length cm (in)	Width cm (in)	Height cm (in)	Weight oz / grams
MI-758-0.1-3.0	12.07 (4.75)	7.62 (3.00)	4.88 (1.92)	13.5 / 380
MI-758-0.1-26.5	14.6 (5.75)	10.16 (4.00)	3.94 (1.55)	14 / 400
MI-758-2.0-26.5	14.6 (5.75)	10.16 (4.00)	3.94 (1.55)	17/482
MI-758-2.0-40	14.6 (5.75)	10.16 (4.00)	3.94 (1.55)	17/482
MI-758-33-50	6.27 (2.47)	3.18 (1.25)	4.76 (1.875)	3.5 / 100
MI-758-40-60	6.27 (2.47)	3.18 (1.25)	4.76 (1.875)	3.5 / 100
MI-758-50-75	6.27 (2.47)	2.54 (1.0)	3.49 (1.375)	3.5 / 100
MI-758-60-90	6.27 (2.47)	2.54 (1.0)	3.49 (1.375)	3.5 / 100
MI-758-75-110	6.27 (2.47)	2.54 (1.0)	3.49 (1.375)	3.5 / 100