mm-Wave Sampling Converters

DESCRIPTION

Designed for conversion of mm-wave input frequencies to less than 1 GHz intermediat frequency.

They are used in mm-wave synthesizer frequency synchronization and stabilization systems. Used as input devices for many types of mm-wave measuring equipment: amplitude and phase meters, network analyzers, frequency counters.

OPERATING CONDITIONS

Operating temperature range: 5…40 °C

Relative humidity: 98%

SPECIFICATIONS

Characteristic	7025	7026	7027	7028	7029	7030
Waveguide type	WR-28	WR-22	WR-19	WR-15	WR-10	WR-6
Frequency range:						
RF, GHz	26.5-40	33-50	40-60	50-75	75-110	110-170
LO, GHz	1-12	1-12	1-12	1-12	1-12	3-12
IF, MHz	1-800	1-800	1-800	1-800	1-800	1-1000
Conversion loss*, dB						
10^{th} harmonic	30	30	30	35	50	–
20^{th} harmonic	35	35	35	40	55	55
30^{th} harmonic	–	–	–	–	–	60
LO power, mW	50-200	50-200	50-200	50-200	50-200	50-200
LO harmonic power at RF input, mW	10^{-3}	10^{-3}	10^{-3}	10^{-3}	10^{-3}	10^{-3}
RF, LO connectors	SMA(f)	SMA(f)	SMA(f)	SMA(f)	SMA(f)	SMA(f)
Dimensions, mm	36x29x29	36x29x29	36x29x29	36x19x19	36x19x19	38x34x19.1
Weight, g	50	40	40	40	35	50

* At RF signal power 0.1 mW, R_{IF}=1 kOhm, f_{IF}=10 MHz

INSTITUTE OF ELECTRONIC MEASUREMENTS KVARZ

IEM "KVARZ" 176 Gagarin Pr., Nizhny Novgorod 603009, Russia Fax (8312) 66-72-88 Tel. (8312) 64-03-41
E-mail:kvarz@kvarz.ru www.kvarz.ru