



Specifications

RF Waveguide Band		Multi-Octave	K	-	Ka	Q	U	V	E	W
RF Frequency Range (GHz)		18-40	18-26.5	22-33	26.5-40	33-50	40-60	50-75	60-90	75-110
RF Port Designation		WRD-180	WR-42	WR-34	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10
LO Port Options		WR-22	WR-42	WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10
		WR-28	SMA	WR-34	WR-22	WR-28	WR-22	WR-19	WR-15	WR-12
		K-Connector		K-Conn.	K-Conn.	WR-19	WR-15	WR-12	WR-10	WR-15
										WR-08
IF Range and Conversion Loss	IF Range (GHz)	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5
	Conversion Loss (dB)	6	5.5	5.5	5.5	6	6.5	7.5	7.5	7.5
	IF Range (GHz)	5-17	5-12	5-12	5-14	5-17	5-20	5-25	5-30	5-35
	Conversion Loss (dB)	8	6.5	6.5	6.5	7	7.5	8	8.5	9

1. Local oscillators (LO) drive level required is 11.0 dBm minimum, 13 dBm typical (nominal) and 17 dBm max. for U-band and below; 15 dBm max. for V-band and above.
2. LO to RF isolation is typical 20 dB.
3. LO to IF isolation is 40 dB typical for LO above RF range and is 20 dB min. for LO below the RF range.
4. Conversion loss is tested at RF power level of -10 dBm



Mechanical Specifications

FREQUENCY BAND	WAVEGUIDE SIZE	FLANGE PATTERN	IF OUTPUT	OUTLINE DIMENSIONS, inches/mm		
				A	B	C
WRD-180	WRD-180	—	SMA JACK	1.12/28.5	1.12/28.5	1.50/29.2
K	WR-42	UG-595/U	SMA JACK	0.88/22.4	1.19/30.2	1.89/48.0
Ka	WR-28	UG-599/U	SMA JACK	0.75/19.1	1.13/28.7	1.50/38.1
Q	WR-22	UG-383/U	SMA JACK	1.13/28.7	1.13/28.7	1.50/38.1
U	WR-19	UG-383/U	SMA JACK	1.13/28.7	1.13/28.7	1.50/38.1
V	WR-15	UG-385/U	SMA JACK	0.75/19.1	0.75/19.1	1.00/25.4
E	WR-12	UG-387/U	SMA JACK	0.75/19.1	0.75/19.1	1.00/25.4
W	WR-10	UG-387/U	SMA JACK	0.75/19.1	0.75/19.1	1.00/25.4