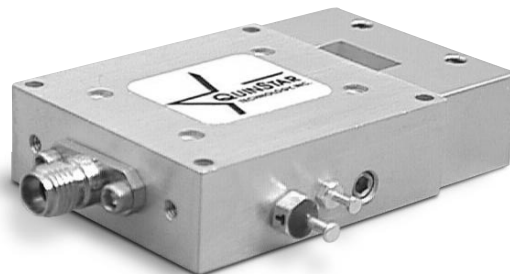




Characteristics

- ◆ Offered Over 18-110 GHz Output Frequency
- ◆ Active Amplification with Integral Filter
- ◆ Low Power Consumption



Product Description

QuinStar Technology's series **QMM active multipliers** utilize state-of-the-art active multiplier devices for frequency multiplication and amplification over the 18-110 GHz frequency range. These frequency multipliers provide a broad bandwidth with multiplying factors between 2 and 6. The standard multiplier housing enables I/O ports of SMA (18-26.5 GHz) and 2.9 mm (18-40 GHz) coaxial connectors and WR-42 through WR-10 waveguide sizes.

These multipliers are useful as part of the LO chain of communication, radar and instrumentation systems. They provide a simple and economical solution for adding signal multiplication and gain in a variety of system applications.

Specifications

Output Frequency ¹ , GHz	Multiplier Factor	Input Frequency, GHz	Output Bandwidth, GHz	Output Power Offered ² , dBm	Input Power Required, dBm typ.	Input Connector or Waveguide	Output Connector or Waveguide	Outline
18-26.5	2	9-13.25	Up to Full Band	13 to27	10	SMA (F)	WR-42/SMA(F)	S _J
26.5-40	2	13.25-20	Up to Full Band	10-20	10	SMA (F)	WR-28/K (F)	S _J
26.5-40	3	8.83-13.33	Up to Full Band	10-20	10	SMA (F)	WR-28/K (F)	S _J
26.5-40	4	6.625-10	Up to Full Band	10-20	10	SMA (F)	WR-28/K (F)	S _J
33-50	2	16.5-25	2-10	10-17	10	SMA (F)	WR-22	S
33-50	3	11-16.67	2-10	10-17	10	SMA (F)	WR-22	S
33-50	4	8.25-12.5	2-10	10-15	10	SMA (F)	WR-22	S
40-60	2	20-30	2-10	10-13	10	K (F)/WR-34	WR-19	S
40-60	3	13.3-20	2-10	10-13	10	SMA (F)	WR-19	S
54-65	2	27-32.5	2-11	7-16	5	K (F)/WR-28	WR-15/WR-19	W
54-65	3	18-21.67	2-11	7-16	10	SMA (F)/WR-42	WR-15/WR-19	W
54-65	4	13.5-16.25	2-11	7-16	10	SMA (F)	WR-15/WR-19	W
50-75	2	25-37.5	5 to Full Band	7-10	10	K (F)/WR-28	WR-19/WR-15	W
50-75	3	16.67-25	5 to Full Band	7-10	10	K (F), SMA (F)/WR-42	WR-15/WR-19	W
50-75	4	12.5-18.75	4 to Full Band	7-10	10	SMA (F)	WR-15/WR-19	W
60-90	3	20-30	4 to Full Band	0	10	K (F)	WR-12/WR-15/WR-10	W
73-79	2	36.5-39.5	2-6	10	5	K (F)	WR-12/WR-10	W
80-86	2	40-43	2-6	5	5	K (F)	WR-12/WR-10	W
92-95	2	46-48	2-4	7-20	10	K (F)/WR-19	WR-10	W
92-95	3	30.67-32	2-4	7-20	10	K (F)/WR-28	WR-10	W
92-95	4	23-24	2-4	7-20	10	SMA (F)	WR-10	W
92-95	6	15.33-16	2-4	7-20	10	K (F)	WR-10	W
75-110	3	25-36.67	4 to Full Band	0-6	10	K (F)	WR-10	W

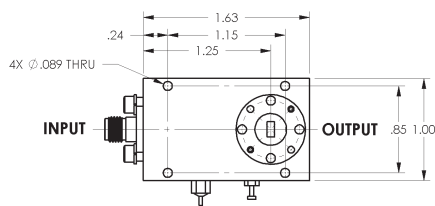
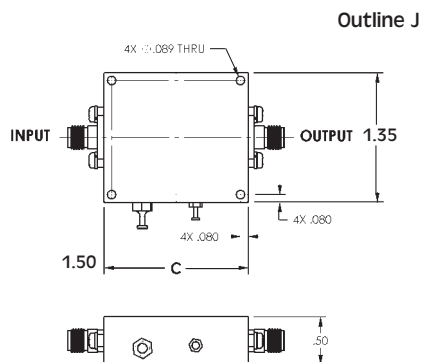
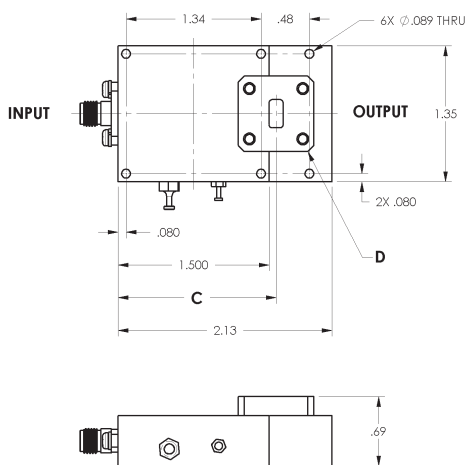
¹ Active Multipliers with other frequency ranges and multiplier factors are available upon request as custom products.

² Maximum available power output varies depending on bandwidth (range) selected. Consult QuinStar for other frequency bands and input and output interfaces.

Outline Drawings/Mechanical Specifications

Outline S

BAND	C	D
K	1.59	UG-595/U
Ka	1.57	UG-599/U
Q	1.56	UG-383/U
U	1.55	UG-383/U MOD



Ordering Information

Model Number **QMM -**

AB CD EF G H



Please specify exact output frequency range when ordering.

output center frequency (rounded to nearest GHz)

bandwidth, in GHz

power output in dBm

outline drawing (see above)

Z = non-standard

multiplying factor

2 = x2, 3 = x3, 4 = x4