



## Specifications

FREQUENCY BAND		K	Ka	Q	U	V	E	W
Frequency Range (GHz)		18-26.5	26.5-40	33-50	40-60	50-75	60-90	75-110
Waveguide Size		WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10
Bandwidth (GHz min)		Full	Full	Full	Full	10	10	10
Insertion Loss (dB max)	QSS	1.5	1.5	1.5	1.8	2	2.5	2.5
	QSD	2	2	2	2.3	2.5	2.8	2.8
Isolation (dB min)	QSS	30	30	26	26	25	20	20
	QSD	23	23	23	23	20	20	20
DC Bias Input <sup>1</sup>	Low Loss (Reverse)	+5V, -5V						
	Isolation (Forward)	35mA typ.						
Switching Speed (ns typ) <sup>2</sup>		250	250	250	250	250	250	250
VSWR (typ)		2:01	2:01	2:01	2:01	2:01	2:01	2:01

1. For ON-state (low insertion loss), the switch requires a reverse voltage of 10 Volts; for OFF-state (isolation), a forward bias current of up to 25 mA is needed. For integral driver option, bias voltage supplies of +5 V and -5 V are required. The switch is controlled by TTL signals.

2. Standard PIN switches require a total switching time of 350 ns max. Faster switching speed options (< 10 ns) are available.



### Mechanical Specifications

FREQUENCY	WAVEGUIDE	FLANGE	BIAS	OUTLINE DIMENSIONS, inches/mm					
BAND	SIZE	PATTERN	INPUT	A	B	C	D	E	F
K	WR-42	UG-595/U	SMA JACK	0.88/22.4	0.88/22.4	1.50/38.1	0.88/2.4	0.94/23.9	1.50/38.1
Ka	WR-28	UG-599/U	SMA JACK	0.75/19.1	0.75/19.1	1.50/38.1	0.75/19.1	0.88/22.4	1.00/25.4
Q	WR-22	UG-383/U	SMA JACK	1.13/28.7	1.13/28.7	1.00/25.4	1.13/28.7	1.31/33.3	1.50/38.1
U	WR-19	UG-383/U	SMA JACK	1.13/28.7	1.13/28.7	1.00/25.4	1.13/28.7	1.31/33.3	1.50/38.1
V	WR-15	UG-385/U	SMA JACK	0.75/19.1	0.75/19.1	0.75/19.0	0.75/19.1	0.88/22.4	1.00/25.4
E	WR-12	UG-387/U	SMA JACK	0.75/19.1	0.75/19.1	0.75/19.0	0.75/19.1	0.88/22.4	1.00/25.4
W	WR-10	UG-387/U	SMA JACK	0.75/19.1	0.75/19.1	0.75/19.0	0.75/19.1	0.88/22.4	1.00/25.4

1. Consult factory for dimensions on switches with greater than 2 throws.