

## Description

Mi-Wave's 530 Series Manual Switches are designed for use in standard millimeter wave frequency bands from 8.4 to 325 GHz. Each unit will operate over the full waveguide bandwidth with minimum insertion loss, minimum VSWR, and maximum isolation between coupled and uncoupled waveguide sections.

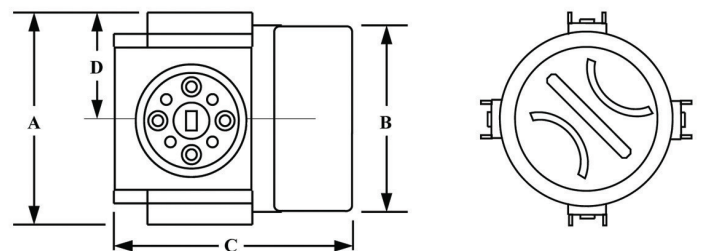
- *Positive Indexing*
- *Optimum Isolation*
- *Non-contacting Choke Coupling*
- *Versatile Switching Combinations*

## Applications

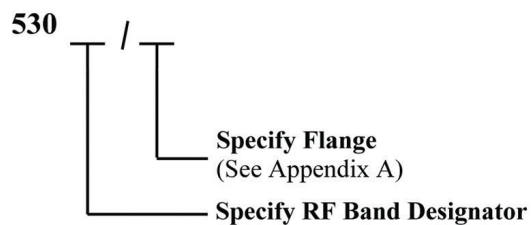
The 530 Series Manual Waveguide Switches are used for transmission switching applications in millimeter wave systems. These versatile devices provide a variety of switching combinations using three waveguide channels and three positions. In a typical radar application, a three-position switch can be used manually to switch one of two transmitters to a common antenna, while simultaneously connecting the other transmitter to a suitable termination. A manual switch will also provide a convenient means for alternately connecting a test antenna and standard horn to gain-measuring test equipment.



Dimensional Specifications								
Model No.	A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
530A/599	1.97	50.0	1.85	47.0	2.10	53.3	.985	25.0
530B/383	1.97	50.0	1.85	47.0	2.10	53.3	.985	25.0
530U/383	1.97	50.0	1.85	47.0	2.10	53.3	.985	25.0
530V/385	1.97	50.0	1.85	47.0	2.10	53.3	.985	25.0
530E/387	1.97	50.0	1.85	47.0	2.10	53.3	.985	25.0
530W/387	1.97	50.0	1.85	47.0	2.10	53.3	.985	25.0
530D/387	1.76	44.7	1.85	47.0	2.10	53.3	.880	22.4
530G/387	1.76	44.7	1.85	47.0	2.10	53.3	.880	22.4



## Ordering Information



**OTHER FREQUENCY BANDS AND CUSTOM CONFIGURATIONS AVAILABLE.**

WR-42 and lower will be E-Plane Types

Technical Specifications (typical)									
Model No.	530A	530B	530U	530V	530E	530W	530F	530D	530G
Frequency Band (GHz)	26.5–40.0	33.0–50.0	40.0–60.0	50.0–75.0	60.0–90.0	75.0–110.0	90.0–140.0	110.0–170.0	140.0–220.0
Isolation (dB) (typical)	60	60	60	60	60	60	50	50	45
Insertion Loss (dB) (typical)	0.3	0.3	0.3	0.4	0.5	0.6	0.7	0.9	1.0
VSWR (typical)	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.20	1.25