

### Description

Mi-Wave's 600 Series Hybrid Rings are four-port, inherently-matched 3 dB power splitting devices. Available in standard waveguide sizes from 18.0 to 220.0 GHz, these units are capable of both in-phase and out-of-phase splitting.

- Low VSWR
- High Isolation
- Minimum Size
- High Reliability
- Equal Power Split
- Low Insertion Loss
- Rugged Construction

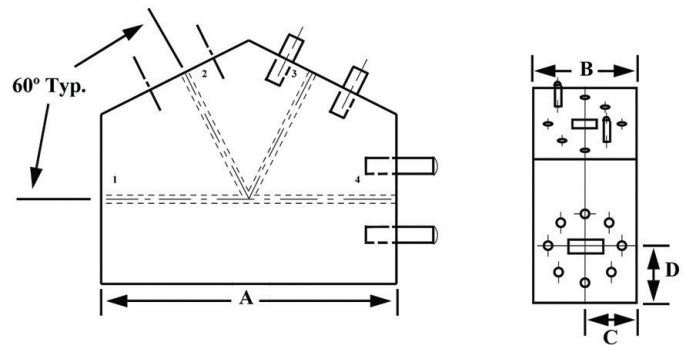
Mi-Wave's 610 Series Triple Hybrid Rings consist of three single hybrid rings

integrated into one compact component. This device provides four 6 dB outputs for use in dual balanced mixers and power divider/combiner circuits.

### Applications

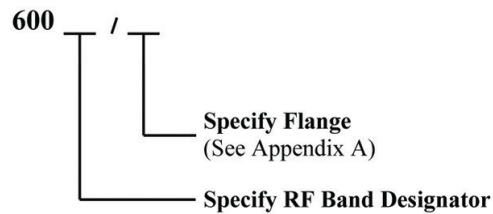
The 600 Series Hybrid Rings are used in balanced mixers and power divider/combiner circuits where precise power splitting, high isolation, and accurate phase inversion are necessary.

Dimensional Specifications								
Model No.	A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
600K	2.50	63.5	1.14	28.9	0.57	14.5	0.63	16.0
600A	2.38	60.9	1.25	31.7	0.63	16.0	0.63	16.0
600B	2.38	60.9	1.25	31.7	0.62	16.5	0.63	16.0
600U	2.34	59.4	1.12	28.4	0.55	14.0	0.57	14.5
600V	1.90	48.3	0.76	19.3	0.38	9.6	0.46	11.7
600E	1.90	48.3	0.76	19.3	0.38	9.6	0.46	11.7
600W	1.90	48.3	0.76	19.3	0.38	9.6	0.46	11.7
600F, D, G	On Request							



Series 600		
Input	Power Split	Phase Relation
1	2, 4	180 degrees out
2	1, 3	in-phase
3	2, 4	in-phase
4	1, 3	180 degrees out

### Ordering Information



Technical Specifications (typical)										
Model No.	600K	600A	600B	600U	600V	600E	600W	600F	600D	600G
Frequency Band (GHz)	18.0–26.5	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)	20	20	20	20	20	20	20	20	20	20
Insertion Loss (dB) Max.	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.8	0.8
Power Imbalance Max. (dB)	5.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
VSWR Max.	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.30
Bandwidth (%)	5	5	5	5	5	5	5	5	5	4
Weight (oz)	22	22	22	22	9.0	9.0	9.0	2.5	2.5	2.5