

Innovation and Excellence in RF & Microwave





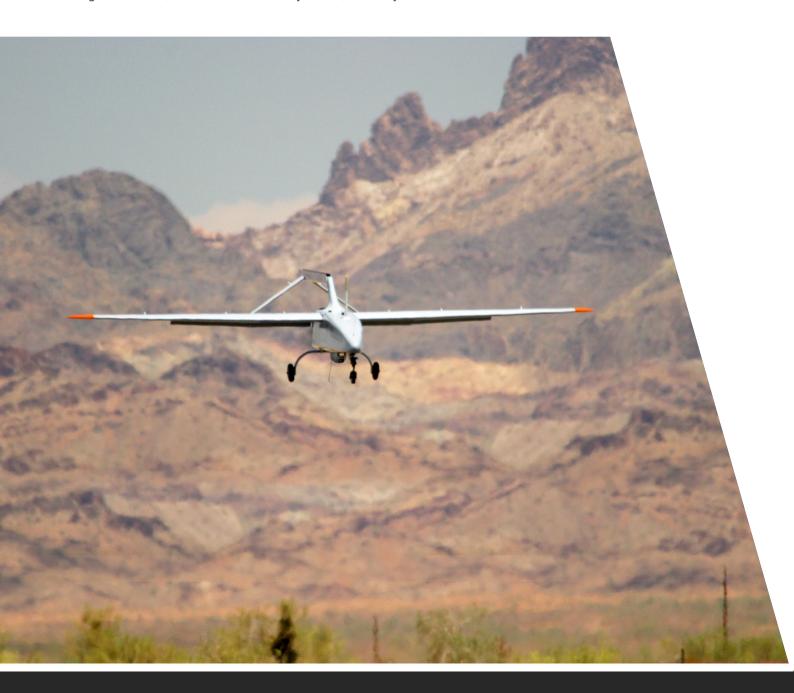
Passive RF Components



#### **Details make a difference**

IMC has acquired more than 25 years of experience in designing & manufacturing Passive components in the RF & Microwave area. IMC's line of passive RF components consists of a vast range of products that operate in a frequency range from 100 MHz up to 40 GHz. IMC obtains knowledge that makes it possible to design passive components with technologies of Coax inputs or Waveguide inputs. Due to the combination of knowledge & experience, IMC's engineers support the customer throughout the course of designing customized Passive components that best suit his specific requirements.

IMC's passive RF components are used in various applications & platforms such as UAS, flight test, telemetry applications, missile experiments, data link communications, robots, fighter aircrafts, guided missiles, flight training simulators, electronic warfare systems, radar systems and more.





## **Filters**

IMC Filters line of product consists of: Band Pass Filters, Low & High Band Filters, Band Stop Filters & Harmonic Filters. IMC's filters can be either Cavity or L & C Filters, with Coax or Waveguide input technologies. IMC obtains the knowledge to design Filters with a very sharp edge and low losses in frequency range from 50 MHz up to 10 GHz with Coax input and up to 40 GHz with Waveguide inputs.

## **Capability Range**

Specification	Range
Frequency	50Mhz - 40Ghz
Туре	Cavity / L & C
Input technology	Coax / Waveguide









## **Power Divider**

IMC Power Dividers line of products start from 2-Way Power Dividers and move up to 16-Way Power Dividers. The Power Divider can be designed either with Coax inputs and outputs or with Waveguide input and outputs. IMC Power Dividers operate in frequency range from 100 MHz up to 40 GHz.

Specification	Range
Frequency	100Mhz - 40Ghz
Input/Output	Coax / Waveguide
Type	2 way up to 16 way









## **Couplers**

IMC's Coupler can be either a directional Coupler or a dual directional Coupler. The Coax Coupler can be designed as a Strip-line or Micro-strip, and the Waveguide Coupler can be designed as Broadwell, Cross-Guide or Sidewall with rectangular Waveguide or double ridge Waveguide. IMC's Couplers operate in frequency range starting at 400 MHz and up to 40 GHz with coupling of 3db to 60db.

#### **Capability Range**

Specification	Range			
Frequency	400Mhz - 40	Ghz		
Coupling	3db up to 60	db		
Coax coupler technology	Strip-line / m	icro-strip	4	
Waveguide	Technology	Broadwell	/ cross-guide / sidewall	9.
coupler	Types	Rectangul	ar / double ridge	•



## **Termination/Dummy Load**

IMC's Termination/Dummy Load line of products are designed with Waveguide technology, handling power up to 16MW CW or several hundred Watts at Peak Power. In IMC's line of products, several types of cooling methods are used; such as heat-sink, vents or water. IMC Termination/Dummy Loads can be made with Rectangular or Double Ridge Waveguide.

Specification	Range
Power	Up to 16MW CW
Cooling method	Heat-sink / Vent / Water
Types	Rectangular / double ridge









## Waveguide

IMC is a leading manufacturer of Double Ridge Waveguide components. IMC has an extensive product line made from rigid, flexible and flex/twist Waveguide. IMC Waveguide can be Rectangular (WR975 ÷ WR28) or Double Ridge (WRD180 ÷ WRD750). IMC specializes in designing and manufacturing Waveguide systems for ships, aircrafts and ground systems (Radar, Tracking systems) and has the capability to design and test Waveguide systems at the customer's premises. IMC Waveguide parts can be made out of Aluminum, Copper or any other Copper Alloys. IMC Waveguide line of product includes H & E Bends with different arm's length, Twist parts in different length, Transitions from one size to another size (example WR90 to WR75 transition), Pressure Windows and integration of flex and rigid Waveguides..

#### **Capability Range**

Specification	Range
Material	Aluminum / Copper / Copper Alloys
Туре	Rectangular (WR975 ÷ WR28) /
	Double ridge (WRD180 ÷ WRD750)
Waveguide	H & E Bends / Twist / Transitions /
components	Pressure Windows









## **Waveguide To Coax Adaptor**

IMC offers a variety of Waveguide to Coax adaptors. IMC designs and manufactures Top Launch or End Line adaptors made from Rectangular Waveguide (WR28  $\div$  WR975) or Double Ridge (WRD180  $\div$  WRD750) with any Coax adaptors (SMA, N-Type, TNC, K-Type, and 2.4mm, 3.5mm or 7/16) and up to 500W.

Specification	Range
Adaptor types	Top Launch / End Line
Coax adaptor	SMA / N-Type / TNC / K-Type / and 2.4mm / 3.5mm or 7/16
Power	Up to 500W
Waveguide Type	Rectangular (WR28 ÷ WR975) / Double ridge (WRD180 ÷ WRD750)











## **Magic Tee**

IMC designs and manufactures Double Ridge Magic Tees starting from WRD200 up to WRD750 with excellent isolation (15db min) at the collinear ports and 30db min at the E & H Ports.

## **Capability Range**

Specification	Range
Waveguide Type	WRD200 up to WRD750
collinear port Isolation	15db min
E & H Port Isolation	30db min







## **Equalizer**

IMC designs and manufactures small sized Equalizers up to 18 GHz with different slops according to the customer requirements.

#### **Capability Range**

Specification	Range
Frequency	Up to 18 Ghz
Slop	different slops





## **Hybrid & Comparator**

IMC's Hybrids and Comparators are designed mainly for Mono-Pulse Tracking systems in L, S & C Band. IMC Hybrids and Comparators are low loss and designed for outdoor use in Ground Systems.

Specification	Range
Frequency	L, S & C Band









IMC Industries is a worldwide leading provider specializing in state-of-the-art RF modules, microwave components and data link communication systems for defense, HLS and civilian applications.

IMC's products supply cutting-edge solutions for aerospace, ground and maritime platforms; each tailor-made configuration is suited for MIL-STD requirements and a variety of client needs.













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