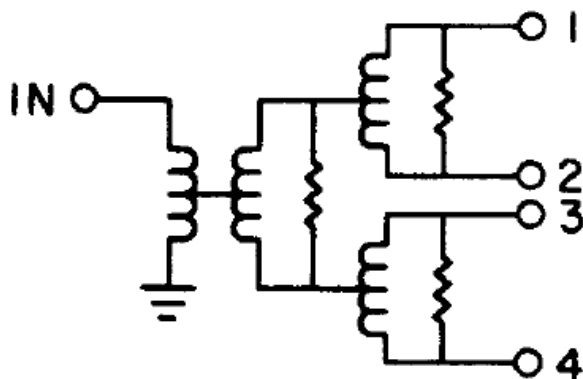


PS-4-500F

Four-Way Power Divider/Combiner
5MHz to 500MHz

The PS-4 series is comprised of one 500MHz 4 way divider and two 1000MHz 4 way dividers, either bandwidth is available in either flatpack or SMA equipped packages. These dividers are known for their excellent amplitude and phase tracking over wide bandwidths. A signal at the input divides into four equal, in-phase signals at the outputs. Four signals at the outputs combine vectorially at the input connector.



Functional Schematic



Package: Flatpack

Features

- Low Insertion Loss
- High Isolation

Applications

- Milcom
- Electronic Warfare
- Industrial, Scientific, Medical
- Aerospace Avionics
- Military and Civilian Radar
- Satellite Communications

Ordering Information

Contact RFMD authorized sales agent or factory.

Absolute Maximum Ratings

Parameter	Rating	Unit
Operating Temperature Range	-54 to +100	°C
Input Power (1/20 Watt Internal Load Dissipation)	1	W



Caution! ESD sensitive device.

Exceeding any one or a combination of the Absolute Maximum Rating conditions may cause permanent damage to the device. Extended application of Absolute Maximum Rating conditions to the device may reduce device reliability. Specified typical performance or functional operation of the device under Absolute Maximum Rating conditions is not implied.

Environmental Conditions

Guaranteed Environmental Performance: All units are designed to meet their specifications between -54°C and +100°C after exposure to any or all of the following tests per MIL-STD-202E.

- Thermal Shock: Method 107D, Test Condition B
- Altitude: Method 105C, Test Condition G
- H.F. Vibration: Method 204C, Test Condition D
- Mechanical Shock: Method 213B, Test Condition C
- Random Vibration (15 minutes per axis): Method 214, Test Condition IIF
- Solderability: Method 208C
- Terminal Strength: Method 211A, Test Condition C
- Resistance to Soldering Heat: Method 210A, Test Condition B

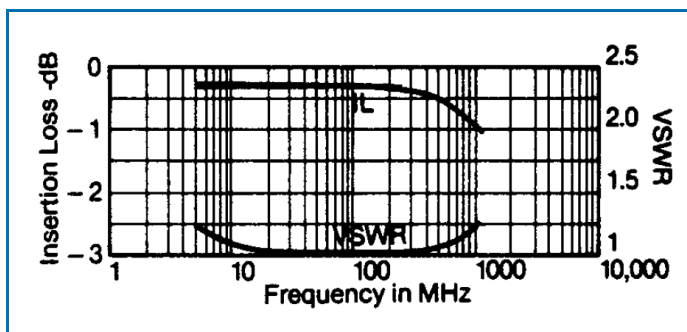
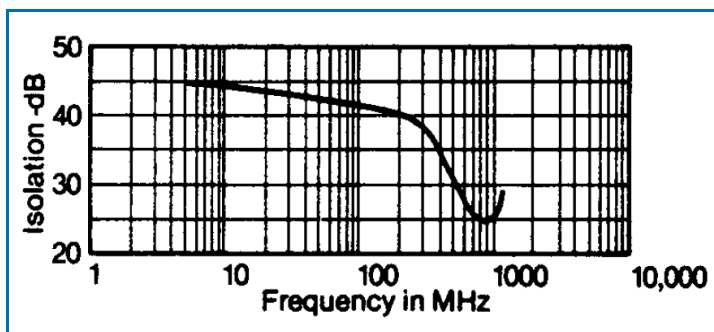
Sealed units meet the requirements of Method 106D of MIL-STD-202E when exposed to humidity.

Nominal Operating Parameters

Parameter	Specification			Unit	Condition
	Min	Typ	Max		
General Performance					
-1dB Bandwidth	5		500	MHz	
Midband Insertion Loss			0.50	dB	
Amplitude Unbalance			0.2	dB	
Phase Unbalance			2	°	
Isolation	20			dB	
VSWR			1.4		

Specifications subject to change without notice.

Typical Performance



Package Drawing

Case Material: F-15 Kovar per ASTM Standard F-15-68 (Chemical composition per MIL-STD-1276, Type K)

Finish: Plating, all metal parts: Gold per MIL-G-45204, Type 1, Grade A, Class 1 over nickel per MIL-C-26074, Class 1

Leads: Kovar per MIL-STD-1276, Type K

