PS-2-1000F

Wideband In Phase Two Way Hybrid Combiner/Divider 5.0MHz to 1000MHz



Package: Flatpack

A two-way in-phase hybrid power combiner/divider is a 180° hybrid power combiner/divider with the difference port (A) internally terminated.

As a two-way power divider, a signal fed into the input port yields two in-phase output signals 3 dB down from the input power.

As a two-way power combiner, signals applied to the output ports yield a vector sum at the input port.

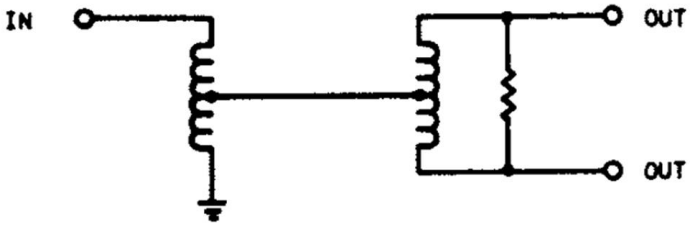
Multi-way binary power combiners/dividers are realized by cascading combinations of the basic two-way device. The power division ratio of the multi-way combiner/divider is 1/n.

Features

- Low Insertion Loss
- 2 Way up to 4GHz
- 3 and 4 Way up to 2GHz
- 6 to 9 Way up to 1GHz

Applications

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



Functional Schematic

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Absolute Maximum Ratings

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

Specifications subject to change without notice.

Environmental conditions: All units are designed to meet their specifications between -54°C and +100°C and 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.



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.

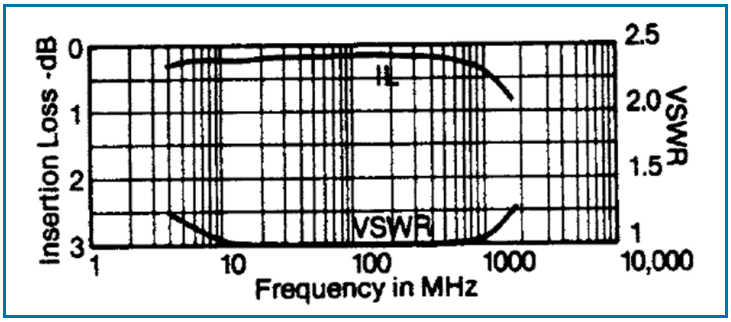
Nominal Operating Parameters

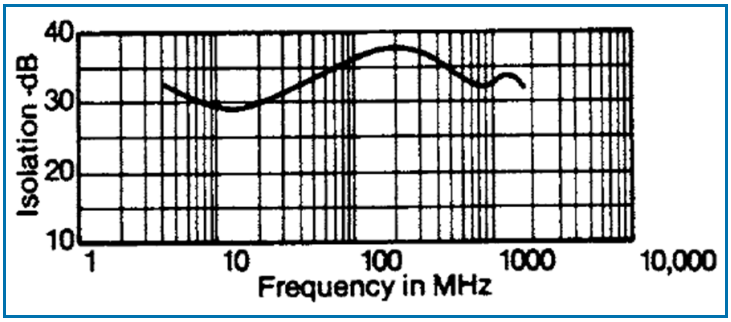
Parameter	Specification			Unit	Condition
	Min	Typ	Max		
General Performance					
Isolation		20		dB	
-1 dB Bandwidth	5.0		1000	MHz	
Midband Insertion Loss		0.5		dB	
Amplitude Unbalance		0.15		dB	
Phase Unbalance		3.0		°C	
VSWR		1.5			

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Typical Performance

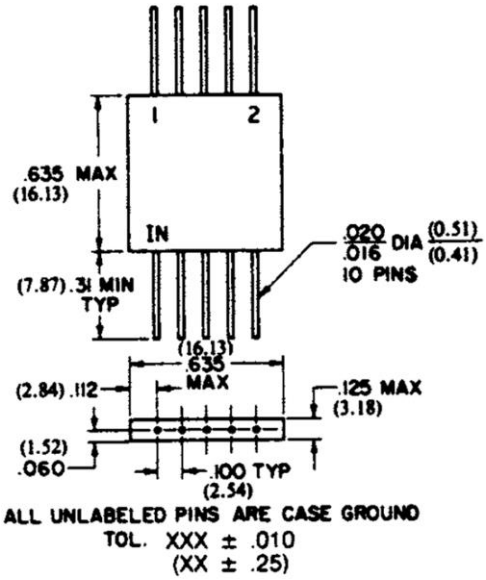




Package Drawing (Dimensions in millimeters)

Material: F15 Kovar per ASTM Std.; F-15-68 chemical composition per MIL-STD-1276, type K

Finish: plating: all metal parts gold per MIL-G-45204, type I, grade A, class 1, over nickel per MIL-C-26074, class 1



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