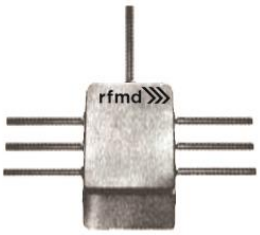
PS-2-4000F

In-Phase Two-Way Power Combiner/Divider 20MHz to 4000MHz

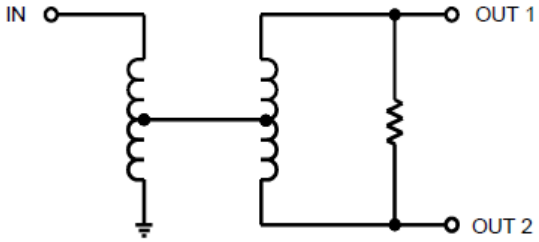


Package: Flatpack

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 3dB 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.



Functional Schematic

Features

- Low Insertion Loss
- High Isolation

Applications

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

Frequency Bands

Parameter	20MHz to 70MHz	70MHz to 1000MHz	1000MHz to 2000MHz	2000MHz to 3000MHz	3000MHz to 4000MHz
Input Return Loss (dB min)	14	14	14	14	14
Output Return Loss (dB min)	11.3	11.3	11.3	11.3	11.3
Insertion Loss (dB max)	1.0	1.0	1.5	2.0	2.8
Amplitude Imbalance (dB max)	±0.1	±0.2	±0.3	±0.6	±1.0
Phase Imbalance (° max)	±1	±3	±4	±6	±8
Isolation (dB min)	13	20	20	20	17

Ordering Information

Contact RFMD authorized sales agent or factory.

RF Micro Devices Inc. 7628 Thorndike Road, Greensboro, NC 27409-9421
For sales or technical support, contact RFMD at +1.336.678.5570 or customerservice@rfmd.com.

DS131219

Environmental Conditions

Guaranteed Environmental Performance: 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-202.

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

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

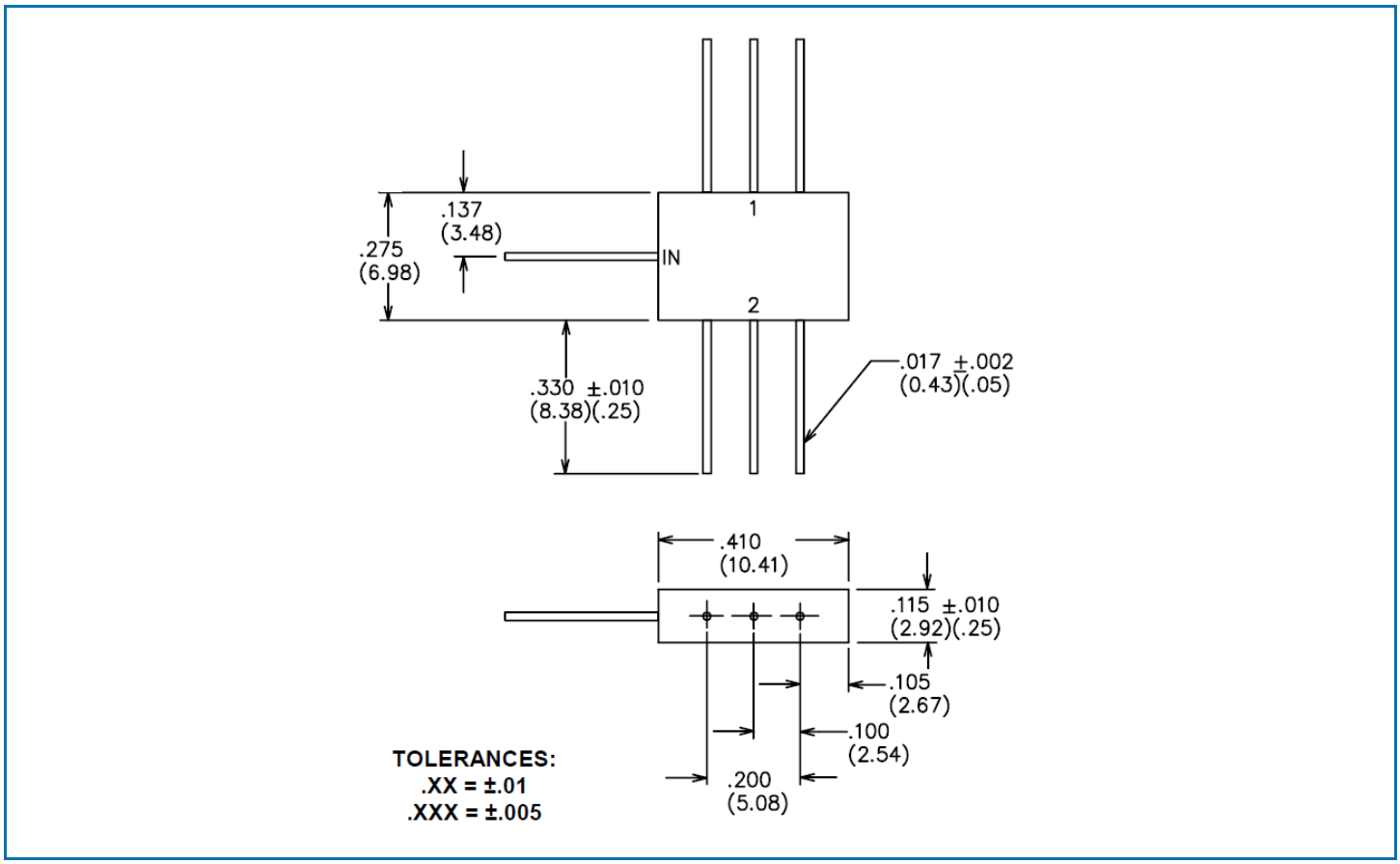
Caution! ESD sensitive device.

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 impli

Package Drawing (Dimensions in inches [millimeters])

Material: frame and leads: F15 Kovar per ASTM standard F15-68 (Chemical composition per MIL-STD-1276, Type K)

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



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PS-2-4000F