

# HIGH POWER DIVIDER/COMBINER

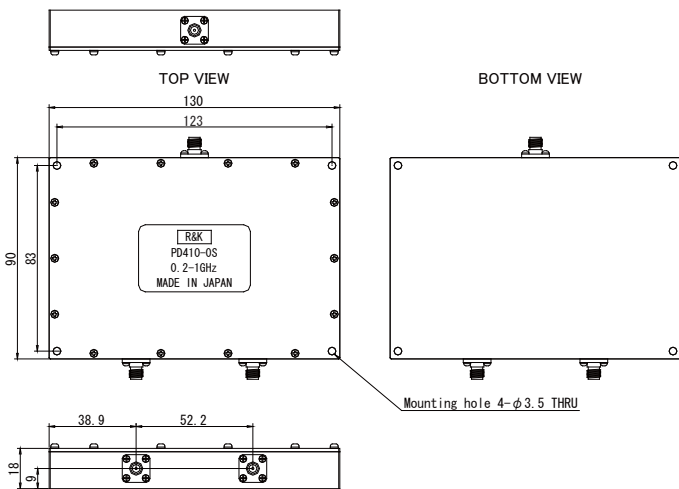


## R&K-PD410-0S



### OUTLINE DRAWING

※IN MILLIMETERS



- Frequency Range : 200MHz ~ 1000MHz
- 2way-0°
- Wilkinson Type
- High Power  $\geq 100W$
- Power Divider and Combiner
- RoHS Compliance

### SPECIFICATIONS @ +25°C

Frequency Range	: 200MHz ~ 1000MHz
Insertion Loss (Except Theoretical Loss 3.0dB)	: 0.6dB (max.)
Amplitude Balance	: 0.2dB (max.)
Isolation	: 14.0dB (min.)
Phase Balance	: 2° (max.)
Phase Difference	: 0°
Between Output Ports	
VSWR (SUM)	: 1.4:1 (max.)
VSWR (Other)	: 1.3:1 (max.)
Impedance	: 50Ω
Maximum RF Input Power (Total Combined Power at SUM Port)	: 100W (1.2:1 Load VSWR)
Operating Temperature	: -20°C to +85°C
Storage Temperature	: -20°C to +100°C
Connectors (Standard)	: SMA-FEMALE
Connectors (Option)	: BNC-FEMALE
Weight (SMA Connector)	: 350g (typ.)
Option	: -IP64(available) : -IP65(available) (Suffix -IP64 or -IP65)

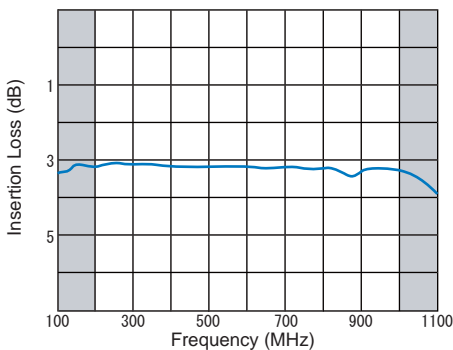
Caution : Absolute Maximum (surface of Base Plate) temperature of this products must be < +85°C  
Proper Cooling must be required.

### HOW TO ORDER

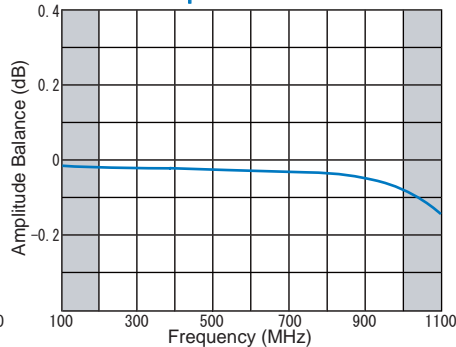
Model Name	R&K-PD410-0S	S = SMA - FEMALE
		B = BNC - FEMALE
		0 = Module
		1 = With Heatsink

### TYPICAL PERFORMANCE (Temp @ +25°C)

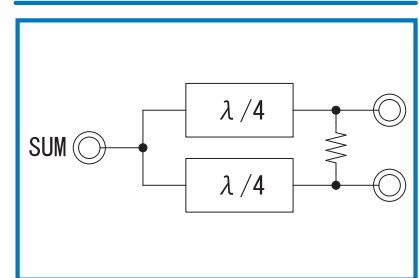
#### Insertion Loss (3dB theoretical Loss included)



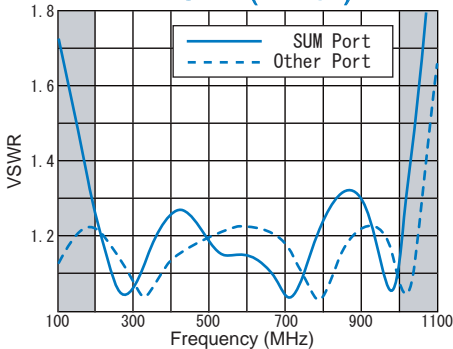
#### Amplitude Balance



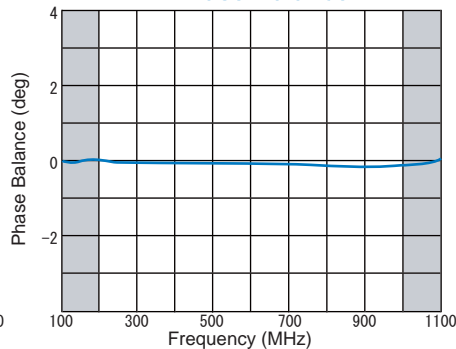
#### SCHEMATIC



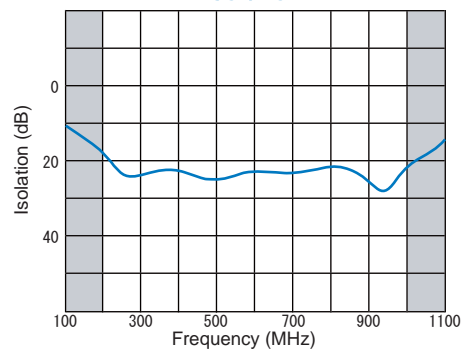
#### VSWR (All Port)



#### Phase Balance



#### Isolation



R&K reserves the right to make changes in the specifications of or discontinue products at any time without notice. R&K products shall not be used for or in connection with equipment that requires an extremely high level of reliability and safety such as aerospace uses or medical life support equipment. Further, R&K cannot export products to any country for use in military or defense applications.

## R&K Company Limited

721-1 Maeda, Fuji-City, Shizuoka-Pref. 416-8577 Japan  
Tel : +81-545-31-2600 E-mail : info@rkco.jp  
Fax : +81-545-31-1600 URL : http://rk-microwave.com

# HIGH POWER DIVIDER/COMBINER

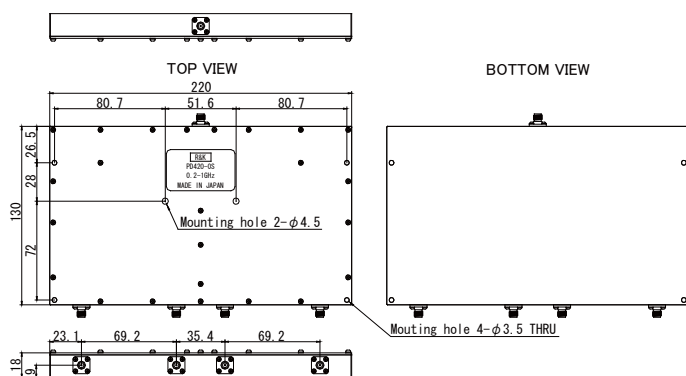


## R&K-PD420-0S



### OUTLINE DRAWING

※ IN MILLIMETERS



- Frequency Range : 200MHz ~ 1000MHz
- 4way-0°
- Wilkinson Type
- High Power  $\geq 100W$
- Power Divider and Combiner
- RoHS Compliance

### SPECIFICATIONS @ +25°C

Frequency Range	: 200MHz ~ 1000MHz
Insertion Loss	: 0.6dB (max.)
(Except Theoretical Loss 6.0dB)	
Amplitude Balance	: 0.3dB (max.)
Isolation	: 12.0dB (min.)
Phase Balance	: 2° (max.)
Phase Difference	: 0°
Between Output Ports	
VSWR (SUM)	: 1.6:1 (max.)
VSWR (Other)	: 1.4:1 (max.)
Impedance	: 50Ω
Maximum RF Input Power	: 100W (1.2:1 Load VSWR)
(Total Combined Power at SUM Port)	
Operating Temperature	: -40°C to +85°C
Storage Temperature	: -40°C to +100°C
Connectors (Standard)	: SMA-FEMALE
Connectors (Option)	: BNC-FEMALE
Weight (SMA Connector)	: 910g (typ.)
Option	: -IP64 (available)
	: -IP65 (available)
	(Suffix -IP64 or -IP65)

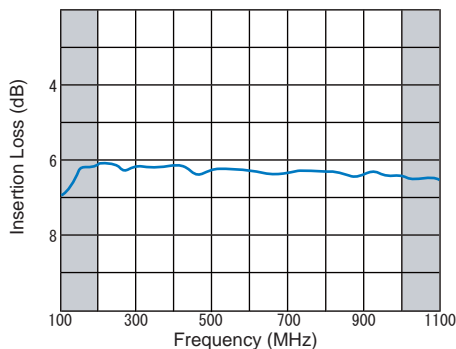
Caution : Absolute Maximum (surface of Base Plate) temperature of this products must be < +85°C  
Proper Cooling must be required.

### HOW TO ORDER

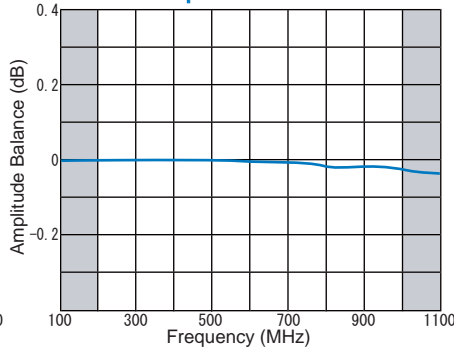
Model Name		S = SMA - FEMALE
R&K-PD420-0S	└─┬─┘	B = BNC - FEMALE
	└─┬─┘	0 = Module
	└─┬─┘	1 = With Heatsink

### TYPICAL PERFORMANCE (Temp @ +25°C)

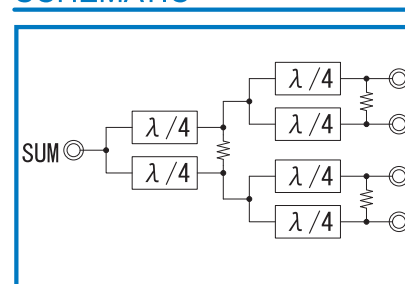
Insertion Loss (6dB theoretical Loss included)



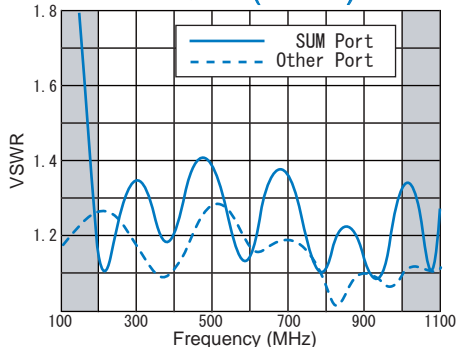
Amplitude Balance



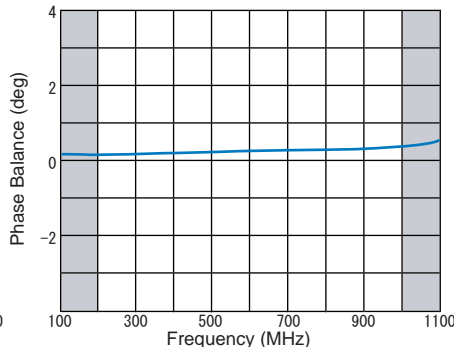
SCHEMATIC



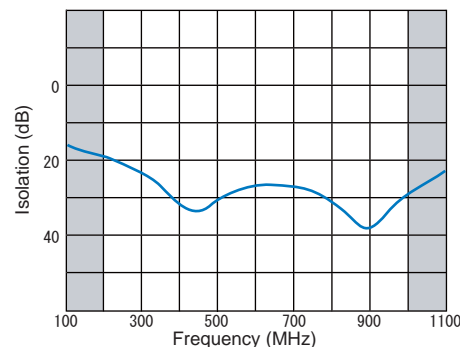
VSWR (All Port)



Phase Balance



Isolation



R&K reserves the right to make changes in the specifications of or discontinue products at any time without notice. R&K products shall not be used for or in connection with equipment that requires an extremely high level of reliability and safety such as aerospace uses or medical life support equipment. Further, R&K cannot export products to any country for use in military or defense applications.

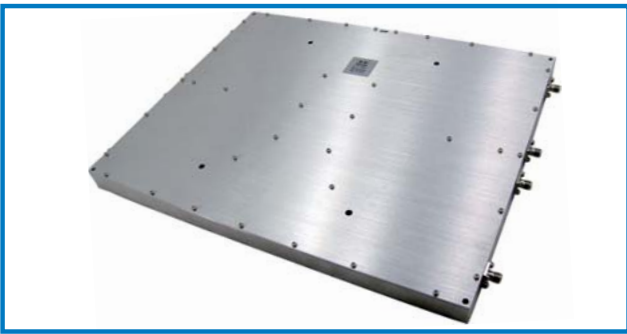
## R&K Company Limited

721-1 Maeda, Fuji-City, Shizuoka-Pref. 416-8577 Japan  
Tel : +81-545-31-2600 E-mail : info@rkco.jp  
Fax : +81-545-31-1600 URL : http://rk-microwave.com

# HIGH POWER DIVIDER/COMBINER

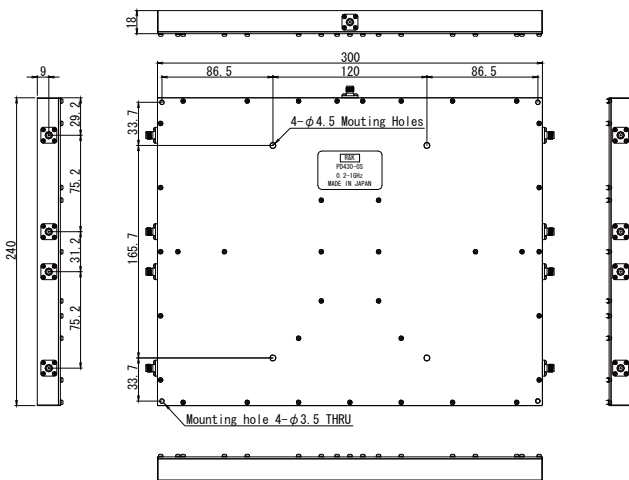


## R&K-PD430-0S



### OUTLINE DRAWING

※IN MILLIMETERS



- Frequency Range : 200MHz ~ 1000MHz
- 8way-0°
- Wilkinson Type
- High Power  $\geq 100W$
- Power Divider and Combiner
- RoHS Compliance

### SPECIFICATIONS @ +25°C

Frequency Range	: 200MHz ~ 1000MHz
Insertion Loss (Except Theoretical Loss 9.0dB)	: 1.0dB (max.)
Amplitude Balance	: 0.4dB (max.)
Isolation	: 12.0dB (min.)
Phase Balance	: 4° (max.)
Phase Difference	: 0°
Between Output Ports	
VSWR (SUM)	: 1.6:1 (max.)
VSWR (Other)	: 1.4:1 (max.)
Impedance	: 50 $\Omega$
Maximum RF Input Power (Total Combined Power at SUM Port)	: 100W (1.2:1 Load VSWR)
Operating Temperature	: -40°C to +85°C
Storage Temperature	: -40°C to +100°C
Connectors (Standard)	: SMA-FEMALE
Connectors (Option)	: BNC-FEMALE
Weight (SMA Connector)	: 2050g (typ.)
Option	: -IP64(available) : -IP65(available) (Suffix -IP64 or -IP65)

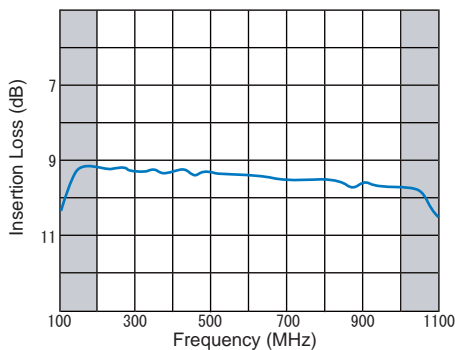
Caution : Absolute Maximum (surface of Base Plate) temperature of this products must be  $< +85^\circ C$   
Proper Cooling must be required.

### HOW TO ORDER

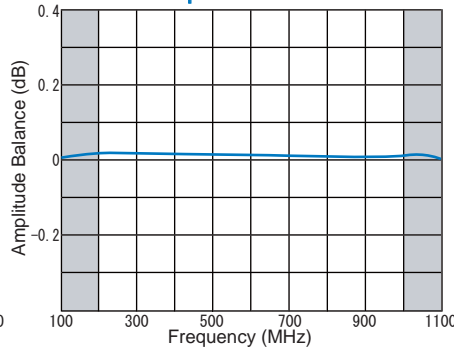
Model Name		S = SMA - FEMALE
R&K-PD430-0S		B = BNC - FEMALE
		0 = Module
		1 = With Heatsink

### TYPICAL PERFORMANCE (Temp @ +25°C)

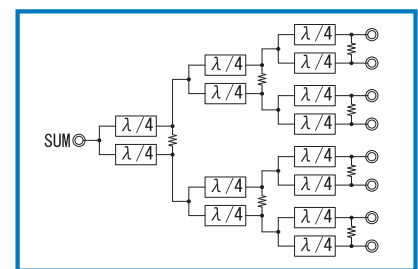
Insertion Loss (9dB theoretical Loss included)



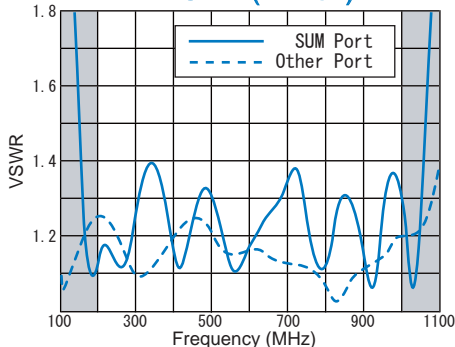
Amplitude Balance



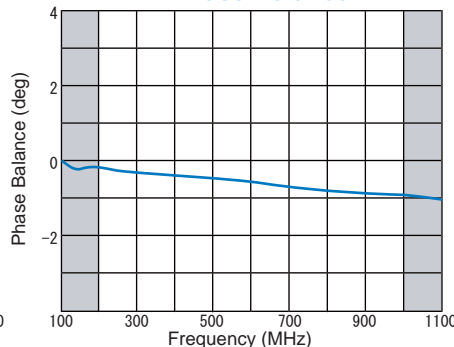
SCHEMATIC



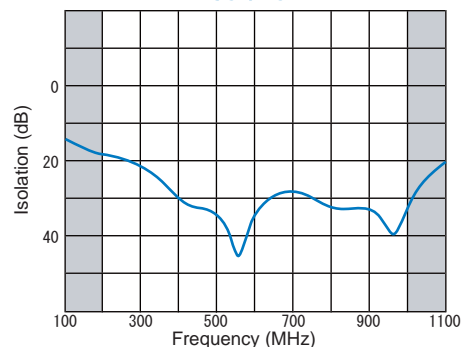
VSWR (All Port)



Phase Balance



Isolation



R&K reserves the right to make changes in the specifications of or discontinue products at any time without notice. R&K products shall not be used for or in connection with equipment that requires an extremely high level of reliability and safety such as aerospace uses or medical life support equipment. Further, R&K cannot export products to any country for use in military or defense applications.

## R&K Company Limited

721-1 Maeda, Fuji-City, Shizuoka-Pref. 416-8577 Japan  
Tel : +81-545-31-2600 E-mail : info@rkco.jp  
Fax : +81-545-31-1600 URL : http://rk-microwave.com