

Product Features

The P1dB P1CP-SAF-R518G30W, 0.5 to 18 GHz directional coupler series is available in three standard coupling values of 10 dB, 20 dB and 30 dB, with coupling values available upon request. The RF couplers come with SMA connectors and can handle up to 30 Watts. The P1dB P1CP-SAF-R518G30W broadband couplers are good solution where wideband frequency coverage is needed, including test instrumentation and general purpose lab use.



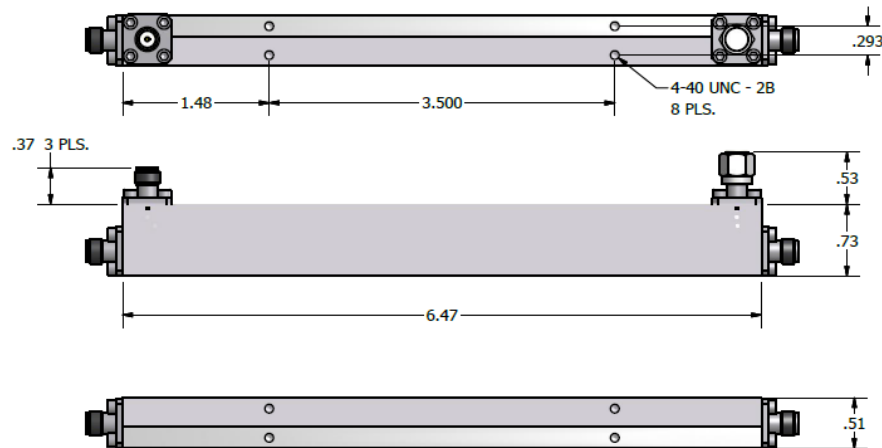
Electrical Specification: $T_{\text{Ambient}} = 25^{\circ}\text{C}$

Parameter	Frequency Range	Units	Min	Typical	Max	Notes
Impedance	0.5 to 18 GHz	Ohms	—	50	—	
Coupling Accuracy	0.5 to 18 GHz	dB	—	—	± 1.0	
Insertion Loss						
10 dB					2.6	Includes coupling loss
20 dB	0.5 to 18 GHz	dB	—	—	1.6	
30 dB					1.5	
Coupling Accuracy						
10 dB			± 1.5	—	—	Including Flatness
20 dB	0.5 to 18 GHz	dB	± 2.0	—	—	
30 dB			± 3.0	—	—	
Directivity						
10 dB, 20 dB	0.5 to 4 GHz	dB	22	—	—	
	4 to 12.4 GHz		15	—	—	
	12.4 to 18 GHz		10	—	—	
30 dB	0.5 to 4 GHz	dB	20	—	—	
	4 to 12.4 GHz		12	—	—	
	12.4 to 18 GHz		9	—	—	
Flatness						
10 dB			± 0.75	—	—	
20 dB	0.5 to 18 GHz	dB	± 0.75	—	—	
30 dB			± 0.80	—	—	
VSWR						
10 dB	0.5 to 8 GHz	1:	—	—	1.35	
	8 to 18 GHz				1.60	
20 dB, 30 dB	0.5 to 8 GHz				1.30	
	8 to 18 GHz				1.35	
Average Power	0.5 to 18 GHz	Watts	—	—	30	Linearly derates to 10% at +100°C

Mechanical Specification

Parameter	Description	Notes
Connector Type	SMA Female	
Connector Material and Plating	Nickel Plated Brass	
Contact Material and Plating	Gold Plated Beryllium Copper	
Housing	Aluminum	

Drawing



Part Number Definition

Coupling Value	Part Number
10 dB	P1CP-R518G30W-10
20 dB	P1CP-R518G30W-20
30 dB	P1CP-R518G30W-30