



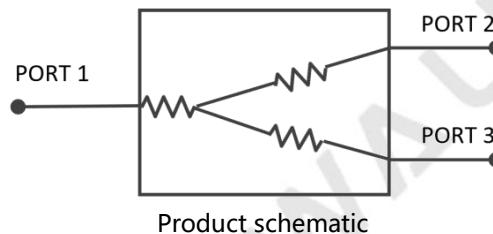
Product Features

- Broadband Design, DC~40GHz
- Miniature size and light weight
- Good Isolation, 7.0dB@DC~40GHz Typ.
- Excellent VSWR, 1.25:1@DC~40GHz Typ.
- Low Insertion Loss, 6.5dB@DC~40GHz Typ.
- Low amplitude (± 0.5 dB typ.) and phase imbalance ($\pm 5^\circ$ typ.)



Product Overview

The PD2040AY-LI is a 2-way 0° resistance power divider&combiner that provides excellent VSWR and low insertion loss in the DC to 40GHz range for a wide range of RF device test measurement and system integration applications.



Typical Applications

- RF test and measurement
- System integration
- Wireless communication
- Radar systems

Specifications

Electrical Specifications:

Item	Condition		Min.	Typ.	Max.	Units
Frequency Range	-		DC	-	40	GHz
Nominal Impedance	-		-	50	-	Ω
Insertion Loss	DC-40GHz		-	6.5	7.5	dB
Isolation OUT-OUT	DC-40GHz		-	7.0	-	dB
IN VSWR	DC-40GHz		-	1.25	1.5	:1
OUT VSWR	DC-40GHz		-	1.25	1.5	:1
Amplitude Imbalance	DC-40GHz		-	-	± 0.5	dB
Phase Imbalance	DC-40GHz		-	-	± 5.0	deg
Power Handling	As Divider	DC-40GHz	-	-	1	W
	As Combiner	DC-40GHz	-	-	1	W

Mechanical Specifications:

Item	Spec.	Units
Connectors	2.92-female	-

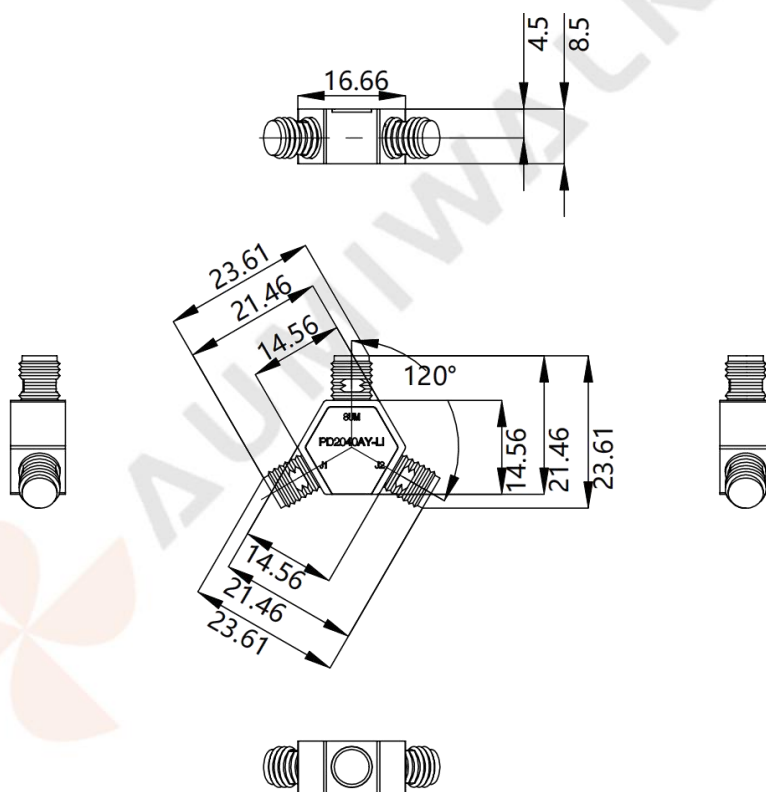
PD Type	Resistive	-
Physical Dimensions(L*W*H)	16.66 * 14.56 * 8.5	mm
Net Weight	≈14	g
Material	Aluminium alloy&Copper	-
Surface Finish	Conductive oxidation&Gold-plated copper	-
Color	Aluminium color&Golden	-

* Note: Package Dimensions & Gross Weight are subject to the actual delivery.

Other Specifications:

Item	Spec.	Units
Operating Temperature	-40~+85	°C
Storage Temperature	-40~+85	°C

Physical Dimensions (Unit:mm)



Interface Information

Interface definition:

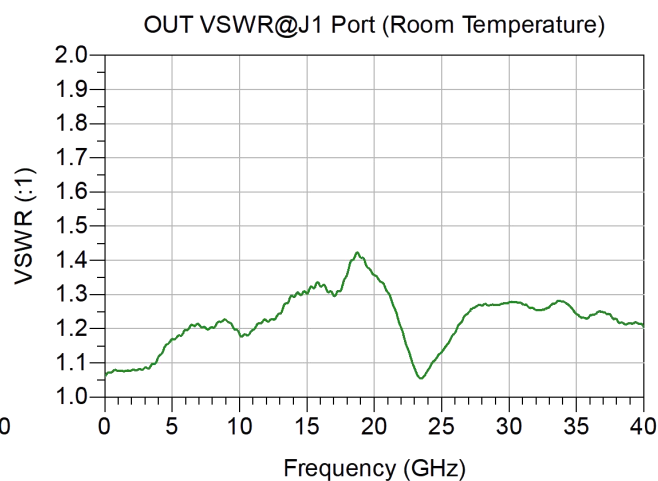
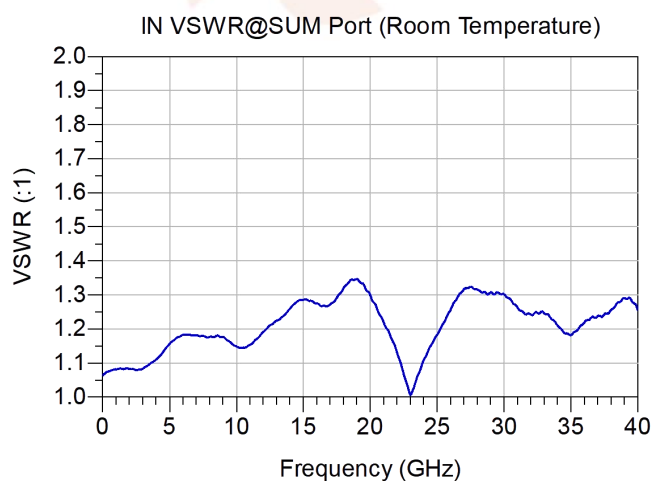
NO.	Function	Description
1	SUM	Electrical signal input port
2	J1	Electrical signal output port 1
3	J2	Electrical signal output port 2

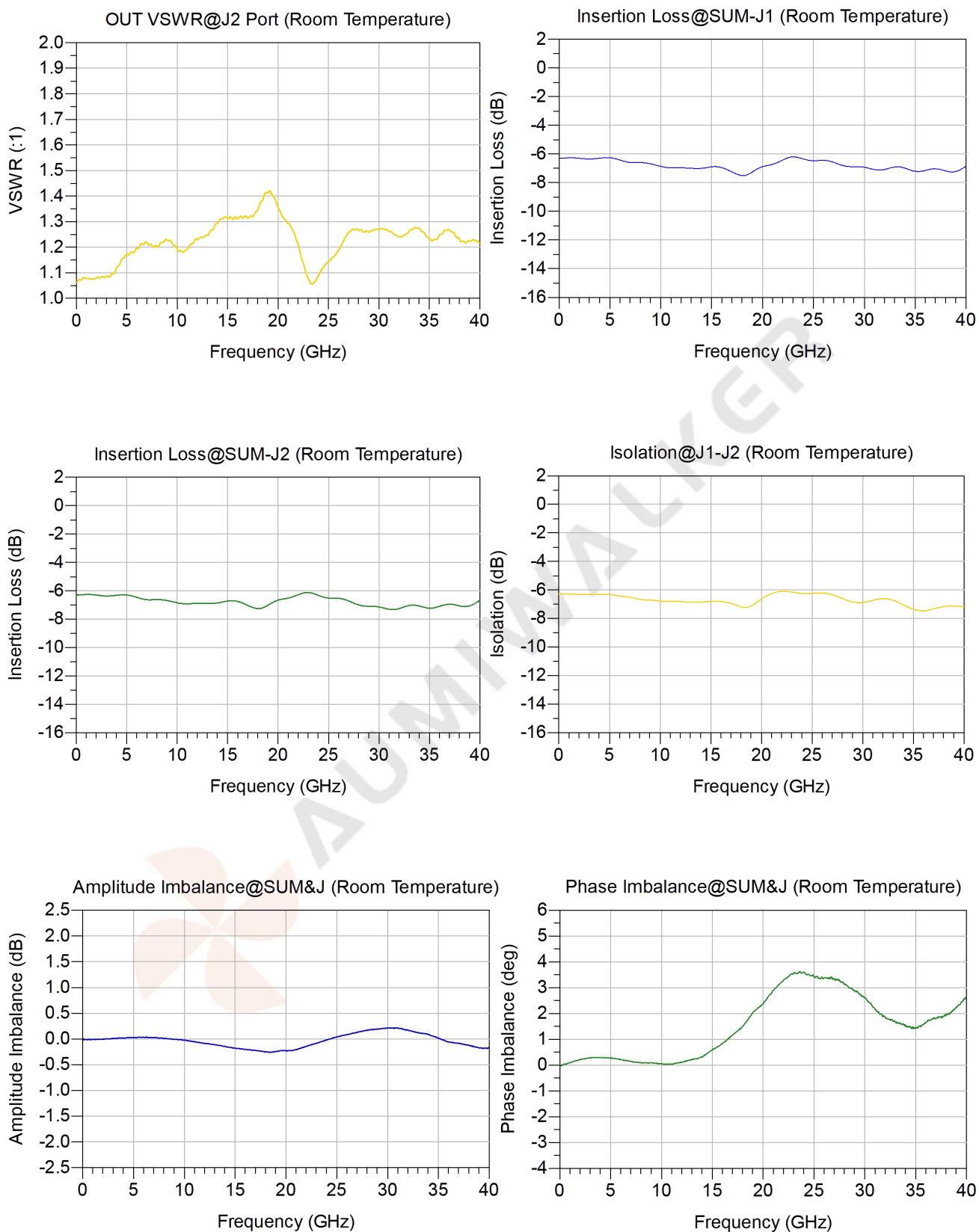
* Note: Please refer to the physical dimensions of the corresponding ports.

Typical Performance Data

Freq. (GHz)	VSWR(:1)			Insertion Loss (dB)		Isolation (dB)	Amplitude Imbalance (dB)	Phase Imbalance (deg)
	SUM	J1	J2	SUM-J1	SUM-J2	J1-J2	-	-
0.01	1.06	1.06	1.06	-6.33	-6.31	-6.26	-0.02	-0.05
0.1	1.07	1.07	1.07	-6.30	-6.29	-6.28	-0.01	-0.02
0.3	1.07	1.07	1.07	-6.29	-6.28	-6.28	-0.01	0.01
0.5	1.08	1.07	1.07	-6.29	-6.28	-6.29	-0.01	0.02
0.7	1.08	1.08	1.08	-6.28	-6.27	-6.30	-0.01	0.04
1	1.08	1.08	1.08	-6.27	-6.26	-6.29	-0.01	0.09
3	1.08	1.09	1.09	-6.35	-6.36	-6.32	0.01	0.28
5	1.16	1.17	1.17	-6.26	-6.29	-6.33	0.03	0.28
7	1.18	1.21	1.22	-6.60	-6.62	-6.51	0.03	0.14
10	1.15	1.18	1.19	-6.87	-6.84	-6.78	-0.02	0.05
13	1.22	1.24	1.25	-7.00	-6.89	-6.87	-0.11	0.22
15	1.29	1.30	1.31	-6.90	-6.72	-6.82	-0.18	0.59
17	1.27	1.30	1.31	-7.26	-7.03	-6.95	-0.22	1.17
20	1.30	1.36	1.36	-6.89	-6.66	-6.64	-0.23	2.38
23	1.01	1.08	1.08	-6.21	-6.12	-6.15	-0.08	3.56
25	1.18	1.13	1.15	-6.47	-6.51	-6.23	0.04	3.41
27	1.32	1.25	1.26	-6.60	-6.72	-6.34	0.13	3.33
30	1.30	1.28	1.27	-6.93	-7.14	-6.89	0.21	2.60
33	1.25	1.26	1.26	-6.91	-7.03	-6.72	0.12	1.67
35	1.18	1.24	1.24	-7.21	-7.22	-7.36	0.02	1.42
37	1.24	1.25	1.27	-7.04	-6.96	-7.33	-0.08	1.81
40	1.26	1.20	1.21	-6.88	-6.70	-7.19	-0.18	2.64

* Note: The data in the table are typical performance data at room temperature.





* Note: The above is typical data and is not used as an acceptance reference.