

5 to 1000 MHz

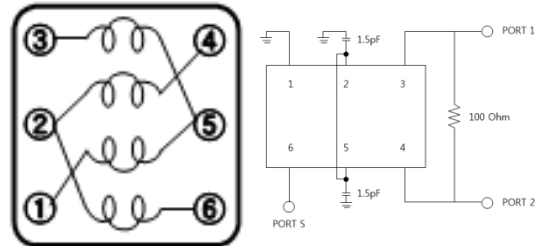
Features

- Low Insertion
- Excellent amplitude unbalance
- Very good phase unbalance
- Extended resistor and capacitor
- Low cost

Applications

- Cellular
- VHF / UHF
- Communication System

Functional Diagram



Description

The PBS10A / PRWS50-2-10A is a RoHS compliant RF Splitter and Combiner in a low cost, surface mount packaging and broadband. The Applications include Cellular, VHF/UHF and Communication system. Transformer is surface mount packaging and is designed high temperature soldering reflow.

Pin No.	Function	Pin No.	Function
6	SUMPORT	1	Ground
3	Port 1	4	Port 2
2	Short	5	Short
EXT. Capacitor 1.5pF 2, 5 to Ground			
EXT. Resistor 100ohm 3,4			

Electric Characteristic

Test Conditions : T=25°C, 50ohm System

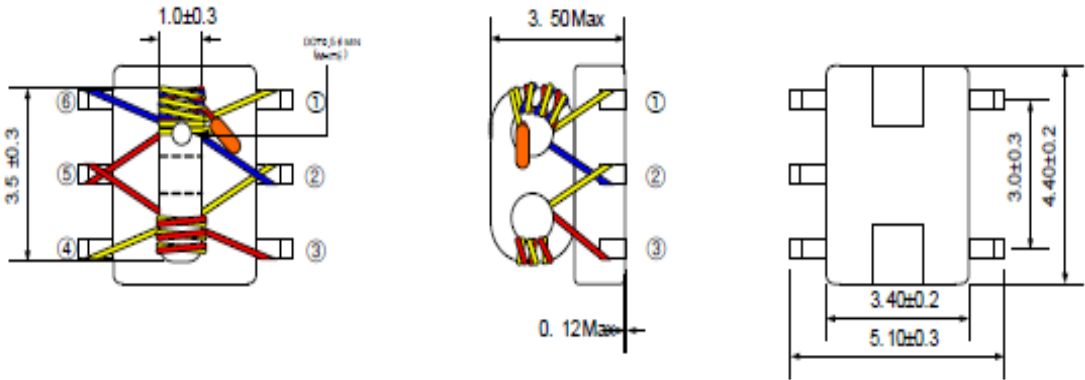
Parameter	Frequency (MHz)	Unit	Min.	Typ.	Max.
Frequency Range		MHz	5		1000
Insertion Loss Above 3.0dB	5 ~ 50	dB	-	0.5	0.9
	50 ~ 500		-	0.5	0.9
	500 ~ 1000		-	0.5	1.4
Isolation	5 ~ 50	dB	25	30	-
	50 ~ 500		22	28	-
	500 ~ 1000		15	20	-
Phase Unbalance	5 ~ 50	Degree	-	-	2
	50 ~ 500		-	-	3
	500 ~ 1000		-	-	6
Amplitude Unbalance	5 ~ 50	dB	-	-	0.4
	50 ~ 500		-	-	0.4
	500 ~ 1000		-	-	0.4

Typical Performance Data

Frequency(MHz)	Total Loss(dB)		Amplitude Unbalance(dB)	Isolation(dB)	Phase Unbalance(deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
5	3.19	3.10	0.09	31.40	0.11	1.04	1.14	1.12
6	3.17	3.09	0.08	31.50	0.12	1.05	1.12	1.10
8	3.17	3.08	0.09	31.70	0.10	1.05	1.11	1.09
10	3.19	3.08	0.11	31.70	0.16	1.05	1.11	1.09
25	3.20	3.10	0.10	31.10	0.20	1.05	1.10	1.08
40	3.17	3.07	0.10	31.10	0.20	1.05	1.10	1.08
60	3.19	3.07	0.12	30.90	0.22	1.06	1.09	1.08
90	3.20	3.05	0.15	30.20	0.10	1.06	1.09	1.07
120	3.23	3.08	0.15	28.80	0.70	1.07	1.09	1.06
200	3.24	3.07	0.17	27.00	1.00	1.11	1.08	1.05
400	3.28	3.13	0.15	23.50	1.40	1.10	1.05	1.02
600	3.43	3.33	0.10	22.00	2.30	1.04	1.06	1.08
800	3.52	3.54	0.02	20.90	2.00	1.09	1.08	1.14
900	3.51	3.69	0.18	20.10	5.00	1.11	1.16	1.18
1000	4.00	4.15	0.15	20.10	4.00	2.09	1.34	1.20

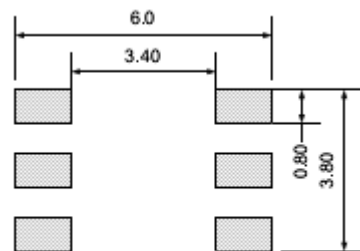
Total Loss = Insertion Loss + 3dB Splitter loss.

Outline Drawing (mm)



All the colors of wire are subject to change without notice.

PCB Footprint (mm)



RECOMMENDED PCB PATTERN

Absolute Maximum Ratings

Parameter	Rating
RF Power	500 mW
DC Current	30mA
Operating Temperature	-40°C to 85°C
Storage Temperature	-55 to +125