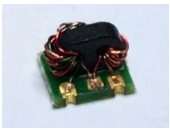
Jieying Communication Technology (Shenzhen) Co., Ltd.
http://www.jytxjs.cn

Power Splitter/Combiner

JY-SBTC-2-10+



2 Way-0° 50Ω 5 to 1000 MHz

Features
- low insertion loss, 0.3 dB typ.
- excellent amplitude unbalance, 0.1 dB typ.
- very good phase unbalance, 1.0 deg. typ.
- temperature stable LTCC base
- small size
- low cost
- aqueous washable

Applications
- UHF/VHF receivers/transmitters
- cellular

Electrical Specifications at 25°C

Parameter	Frequency(MHz)	Min.	Typ.	Max.	Unit
Frequency Range	-	5		1000	MHz
Insertion Loss Above 3.0 dB	5-50 50-500 500-1000	- - -	0.3 0.3 0.3	0.7 0.8 1.5	dB
Isolation	5-50 50-500 500-1000	20 18 16	29 25 20	- - -	dB
Phase Unbalance	5-50 50-500 500-1000	- - -	- - -	3 3 5	Degree
Amplitude Unbalance	5-50 50-500 500-1000	- - -	- - -	0.6 0.5 0.5	dB

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.5W max.
Internal Dissipation	0.125W max

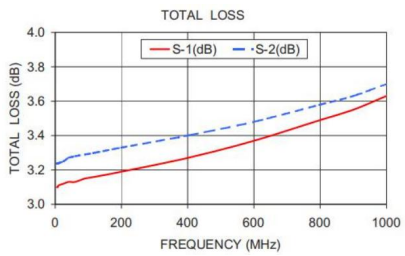
Permanent damage may occur if any of these limits are exceeded.

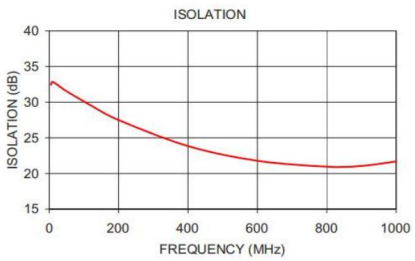
Pin Connections

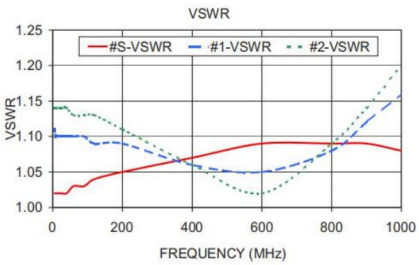
SUM PORT	6
PORT 1	3
PORT 2	4
GROUND	1,2
NOT USED	5

Typical Performance Data

Frequency (MHz)	Total Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWRS		
	S-1	S-2				S	1	2
5	3.10	3.24	0.14	30.0	0.15	1.02	1.10	1.14
10	3.11	3.24	0.13	28.8	0.09	1.02	1.10	1.14
50	3.13	3.28	0.14	28.3	0.09	1.03	1.10	1.13
100	3.15	3.29	0.14	26.3	0.10	1.03	1.03	1.11
200	3.19	3.33	0.14	22.9	0.24	1.05	1.05	1.10
300	3.27	3.40	0.13	21.9	0.45	1.07	1.07	1.06
500	3.37	3.48	0.11	21.5	0.71	1.09	1.09	1.02
800	3.46	3.58	0.09	21.4	0.98	1.09	1.09	1.08
1000	3.63	3.70	0.07	21.2	1.29	1.08	1.16	1.18

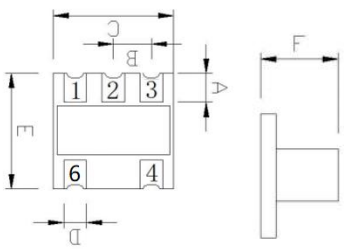




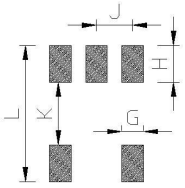


Functional Schematic

Outline Drawing



PCB Land Pattern



Suggested Layout,
Tolerance to be within± 0.15

Outline Dimensions：Unit (mm)

A	1.00	B	1.27	C	4.20
D	0.76	E	4.08	F	2.90
G	0.76	H	1.30	J	1.27
K	2.21	L	4.81	wt	0.06g

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