Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

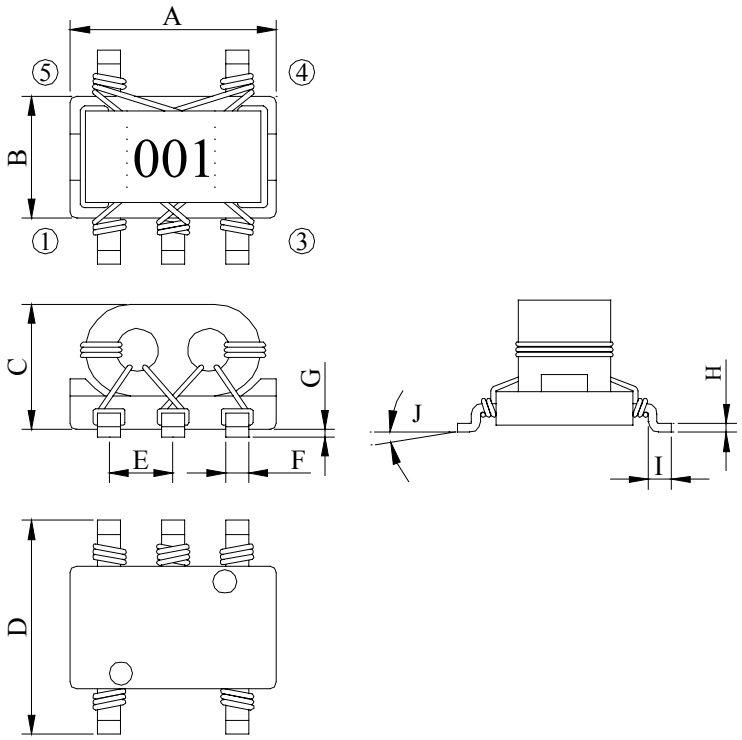
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

SPECIFICATION FOR APPROVAL

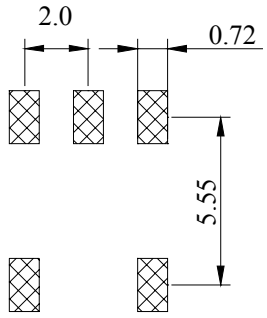
REF :

PROD. NAME	SMD BALUN TRANSFORMER	DWG NO.	BRN6044 Series
		ITEM NO.	

Ⅰ．MECHANICAL DIMENSIONS：



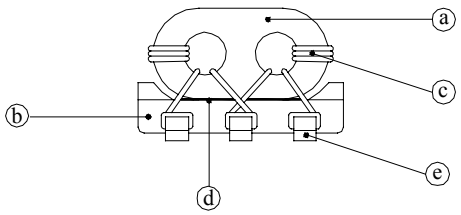
A : 6.20±0.20 m/m
B : 4.00±0.20 m/m
C : 4.40 max. m/m
D : 6.40±0.30 m/m
E : 2.00 typ. m/m
F : 0.60±0.05 m/m
G : 0.20±0.10 m/m
H : 0.30±0.10 m/m
I : 0.70±0.05 m/m
J : 0°～ 8° m/m



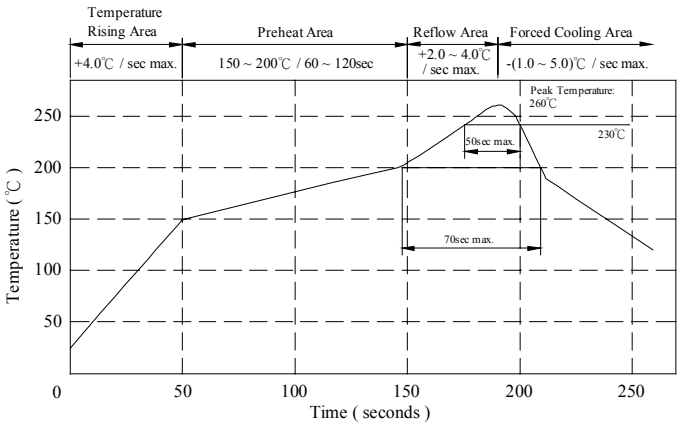
(PCB Pattern)

Ⅱ．MATERIALS：

a. Core：Ferrite RID core
b. Base：Phenolic
c. Wire：Enamelled copper wire (class F)
d. Adhesive：Epoxy resin
e. Terminal：Cu/Ni/Sn (Lead content 100ppm max.)
f. Remark：Ferrite body is exempted with lead content under RoHS regulation



Peak Temp：260℃ max.
Max time above 230℃ ：50sec max.
Max time above 200℃ ：70sec max.



Ⅲ．FEATURES：

a. Paired wire coil for high stability.
b. Base Pin terminal treated , Allowing Mounting 'AS IS' ON A PCB.

Ⅳ．APPLICATIONS：

a. Double balance mixers , Broad-Band Transformers, Impedance Transformers , ETC.

SPECIFICATION FOR APPROVAL

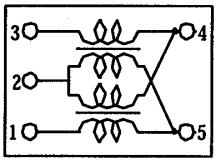
REF :

PROD. NAME	SMD BALUN TRANSFORMER	DWG NO.	BRN6044 Series
		ITEM NO.	

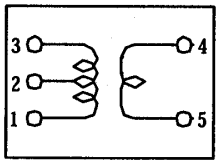
V . ELECTRICAL CHARACTERISTICS :

DWG NO.	WINDING TURNS	OPERATING FREQUENCY RANGE	INSERTION LOSS	FIG.
BRN6044-0001S	1	50.0MHz-400.0MHz	10.0dB max.	1
BRN6044-0002S	2	10.0MHz- 1.0GHz	6.0dB max.	1
BRN6044-0003S	3	8.0MHz-800.0MHz	3.5dB max.	1
BRN6044-0004S	4	6.0MHz-600.0MHz	2.5dB max.	1
BRN6044-0005S	5	5.0MHz-500.0MHz	2.0dB max.	1
BRN6044-0006S	2	400.0MHz- 1.3GHz	4.0dB max.	1
BRN6044-0007S	Pri Sec 1x2 1	25.0MHz-450.0MHz	8.0dB max.	2
BRN6044-0008S	Pri Sec 2x2 2	9.0MHz-350.0MHz	3.0dB max.	2
BRN6044-0009S	Pri Sec 3x2 3	3.5MHz-470.0MHz	3.0dB max.	2
BRN6044-0010S	Pri Sec 4x2 4	2.2MHz-400.0MHz	3.0dB max.	2
BRN6044-0011S	Pri Sec 5x2 5	1.5MHz-300.0MHz	3.0dB max.	2
BRN6044-0012S	4	6.0MHz-600.0MHz	IN to OUT-1 1.3dB max. IN to OUT-2 11dB~14dB	3
BRN6044-0013S	5	6.0MHz-600.0MHz	IN to OUT-1 0.9dB max. IN to OUT-2 13dB~16dB	3
BRN6044-0014S	6	6.0MHz-600.0MHz	IN to OUT-1 0.8dB max. IN to OUT-2 15dB~17dB	3
BRN6044-0015S		20.0MHz-600.0MHz	IN to OUT-1,2 4.5dB max. OUT-1 to OUT-2 (ISOLATION) 10dB min.	4

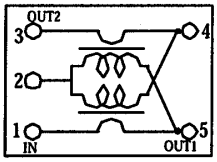
VI . SCHEMATIC DIAGRAM :



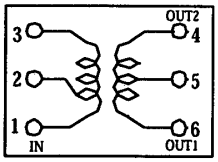
Double balanced mixer
Fig.1



Transformer
Fig.2



Directional coupler
Fig.3



Distributor
Fig.4

Bourns Inductive Solution

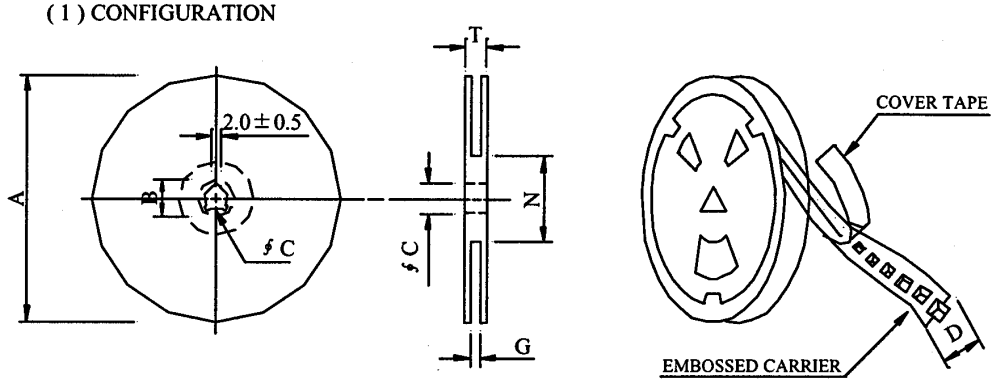
SPECIFICATION FOR APPROVAL

REF :

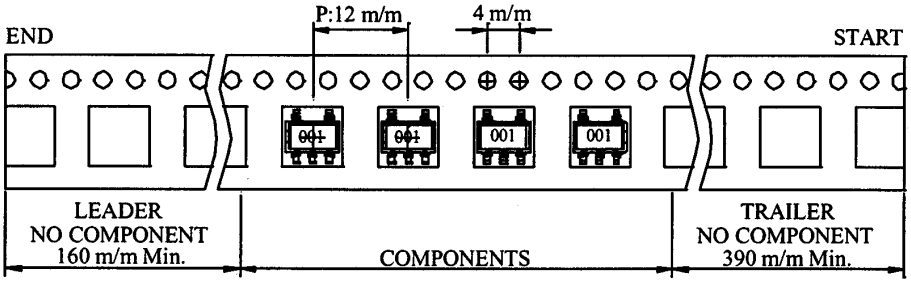
PROD. NAME	SMD BALUN TRANSFORMER	DWG NO.	BRN6044 Series
		ITEM NO.	

Ⅶ . PACKAGING INFORMATION :

(1) CONFIGURATION



※CARRIER TAPE WIDTH : D



USER DIRECTION OF FEED

(2) DIMENSIONS

Unit:m/m

STYLE	A	B	C	D	G	N	T
07 - 16	178	21±0.8	13	16	18^{+0}	50^{-0}	22.4
13 - 16	330	21±0.8	13	16	18^{+0}	50^{-0}	22.4

(3) Q'TY & G.W. PER PACKAGE

SERIES	INNER : REEL			OUTER : CARTON		
	Q'TY (PCS)	G.W. (gw)	STYLE	Q'TY (PCS)	G.W. (Kg)	SIZE (cm)
BRN6044	300	113	07 - 16	12,000	5.2	39 x 38 x 21.5
BRN6044	1,000	450	13 - 16	8,000	4.2	40 x 40 x 24

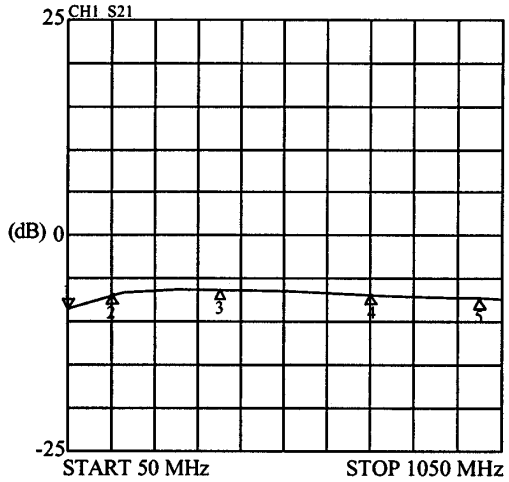
SPECIFICATION FOR APPROVAL

REF :

PROD. NAME	SMD BALUN TRANSFORMER	DWG NO.	BRN6044 Seies
		ITEM NO.	

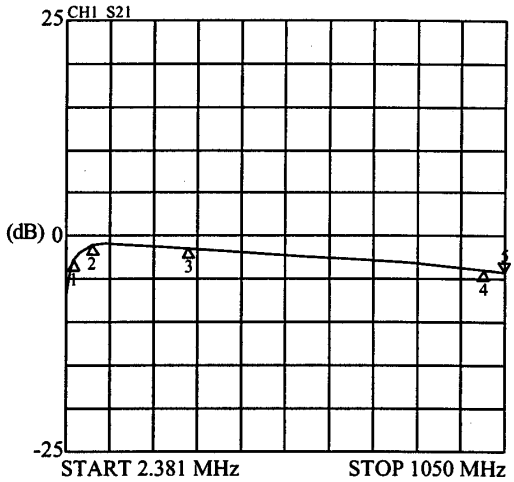
X . INSERTION LOSS TEST CURVE :

BRN6044-0001



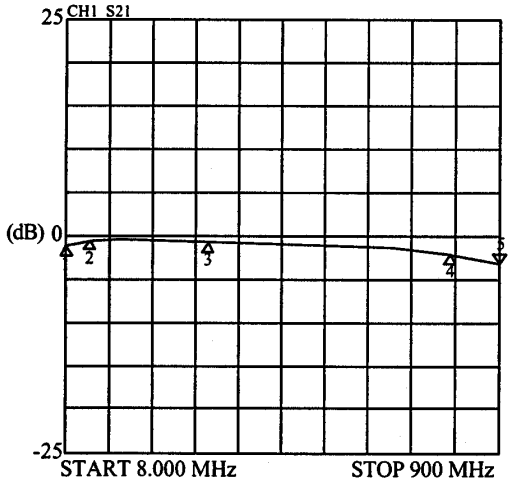
① -8.3183 dB / 50 MHz
② -6.9458 dB / 150 MHz
③ -6.5162 dB / 400 MHz
④ -6.9308 dB / 750 MHz
⑤ -7.2489 dB / 1000 MHz

BRN6044-0002



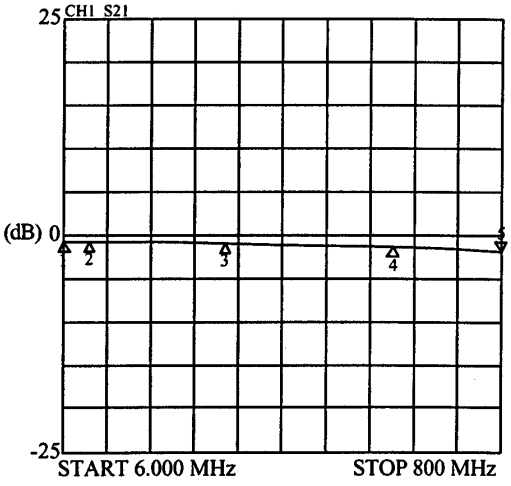
① -3.1380 dB / 10 MHz
② -1.8866 dB / 50 MHz
③ -2.1536 dB / 300 MHz
④ -4.5075 dB / 1000 MHz
⑤ -4.6947 dB / 1050 MHz

BRN6044-0003



① -1.3816 dB / 8 MHz
② -0.8999 dB / 50 MHz
③ -1.0204 dB / 300 MHz
④ -2.2180 dB / 800 MHz
⑤ -2.8778 dB / 900 MHz

BRN6044-0004



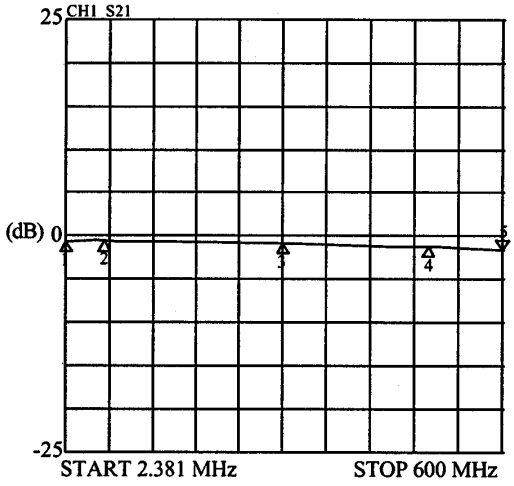
① -0.8196 dB / 6 MHz
② -0.5688 dB / 50 MHz
③ -0.9145 dB / 300 MHz
④ -1.3710 dB / 600 MHz
⑤ -2.2616 dB / 800 MHz

SPECIFICATION FOR APPROVAL

REF :

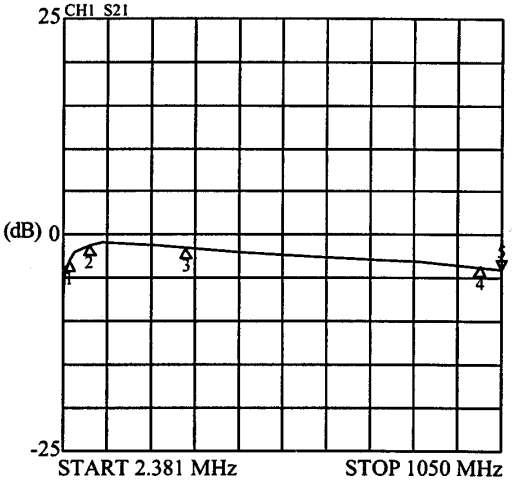
PROD. NAME	SMD BALUN TRANSFORMER	DWG NO.	BRN6044 Series
		ITEM NO.	

BRN6044-0005



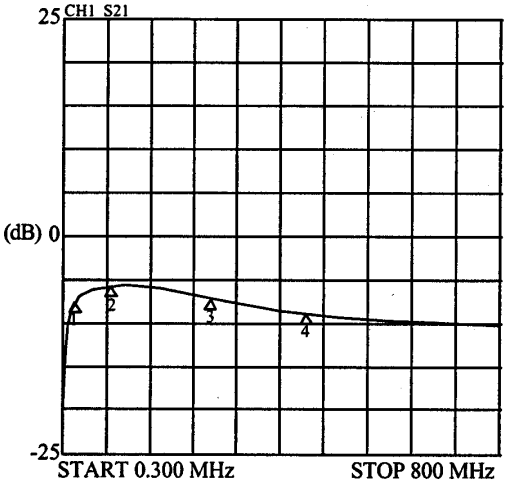
① -0.4705 dB / 5 MHz
② -0.3969 dB / 50 MHz
③ -0.6995 dB / 300 MHz
④ -1.0571 dB / 500 MHz
⑤ -1.5255 dB / 600 MHz

BRN6044-0006



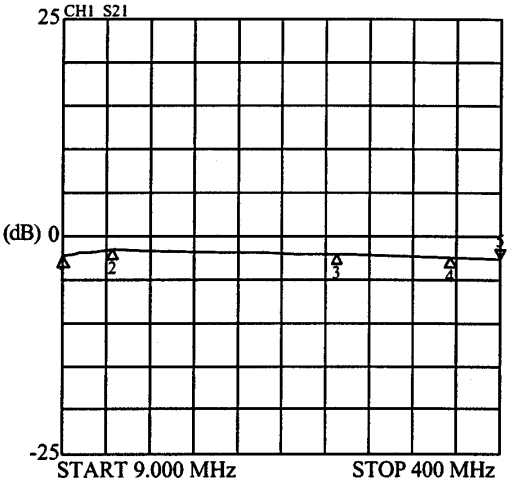
① -3.1380 dB / 10 MHz
② -1.8866 dB / 50 MHz
③ -2.1536 dB / 300 MHz
④ -4.5075 dB / 1000 MHz
⑤ -4.6947 dB / 1050 MHz

BRN6044-0007



① -7.5302 dB / 25 MHz
② -5.8535 dB / 100 MHz
③ -6.6327 dB / 300 MHz
④ -7.7140 dB / 800 MHz

BRN6044-0008



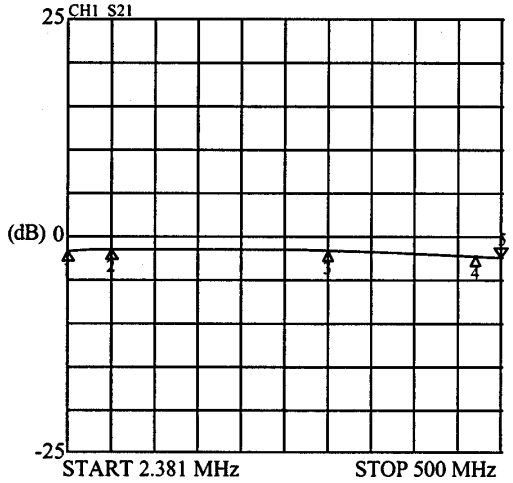
① -2.6066 dB / 9 MHz
② -1.8676 dB / 50 MHz
③ -2.0201 dB / 250 MHz
④ -2.3222 dB / 350 MHz
⑤ -2.5982 dB / 400 MHz

SPECIFICATION FOR APPROVAL

REF :

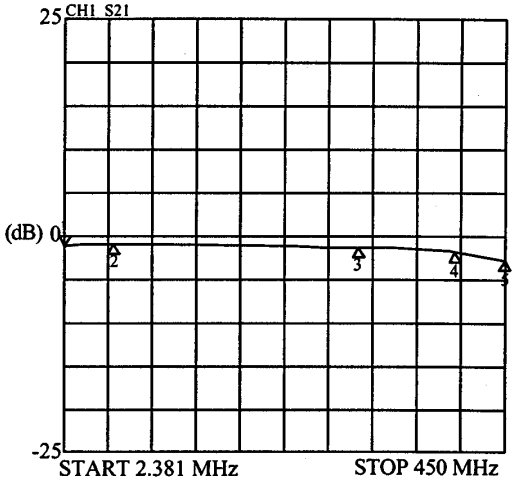
PROD. NAME	SMD BALUN TRANSFORMER	DWG NO.	BRN6044 Series
		ITEM NO.	

BRN6044-0009



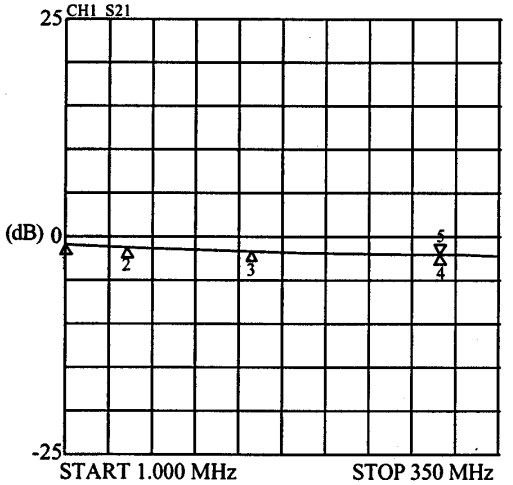
① -1.9681 dB / 3.5 MHz
② -1.3742 dB / 50 MHz
③ -1.6774 dB / 300 MHz
④ -2.1016 dB / 470 MHz
⑤ -2.3843 dB / 500 MHz

BRN6044-0010



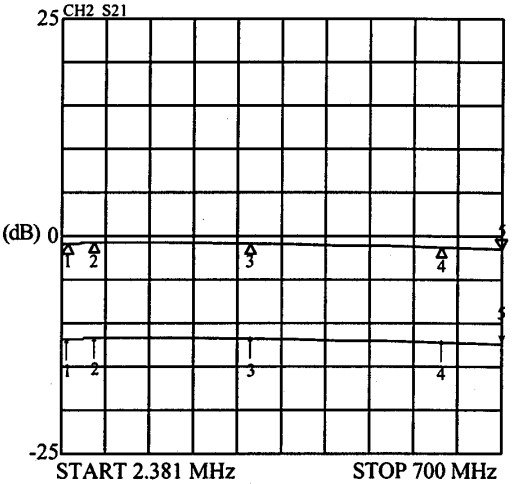
① -0.8878 dB / 2.381 MHz
② -0.7163 dB / 50 MHz
③ -1.2644 dB / 300 MHz
④ -1.9968 dB / 400 MHz
⑤ -3.0278 dB / 450 MHz

BRN6044-0011



① -0.5992 dB / 1.5 MHz
② -0.7765 dB / 50 MHz
③ -1.4662 dB / 150 MHz
④ -2.3604 dB / 300 MHz
⑤ -2.3604 dB / 300 MHz

BRN6044-0012



"△" : IN-OUT 1

① -0.9926 dB / 6 MHz
② -0.7059 dB / 50 MHz
③ -0.7940 dB / 300 MHz
④ -1.1147 dB / 600 MHz
⑤ -1.2524 dB / 700 MHz

" ↑ " : IN-OUT 2

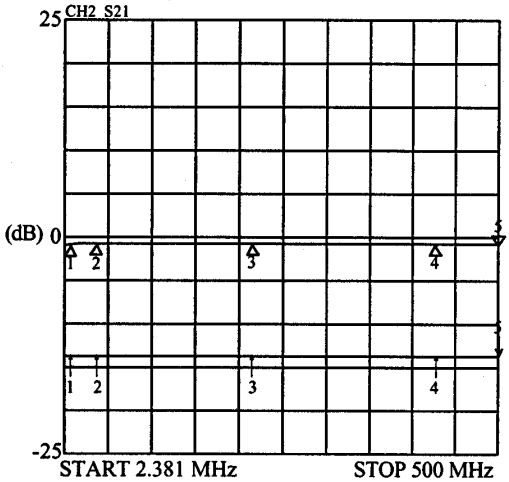
① -12.378 dB / 6 MHz
② -12.303 dB / 50 MHz
③ -12.505 dB / 300 MHz
④ -12.907 dB / 600 MHz
⑤ -13.049 dB / 700 MHz

SPECIFICATION FOR APPROVAL

REF :

PROD. NAME	SMD BALUN TRANSFORMER	DWG NO.	BRN6044 Series
		ITEM NO.	

BRN6044-0013



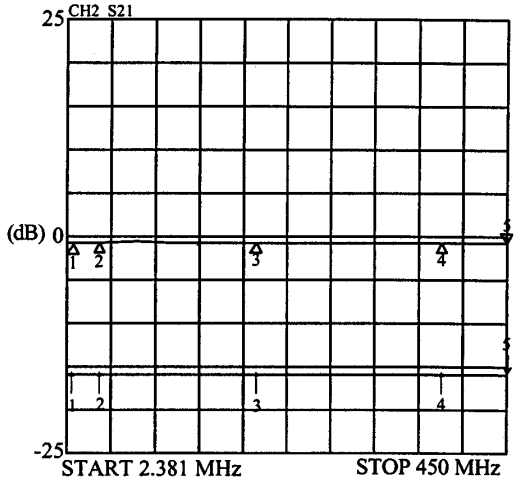
"△" : IN-OUT 1

① -0.6377 dB / 6 MHz
② -0.4683 dB / 50 MHz
③ -0.5063 dB / 300 MHz
④ -0.6722 dB / 600 MHz
⑤ -0.7370 dB / 700 MHz

" ↑ " : IN-OUT 2

① -14.222 dB / 6 MHz
② -14.177 dB / 50 MHz
③ -14.254 dB / 300 MHz
④ -14.309 dB / 600 MHz
⑤ -14.300 dB / 700 MHz

BRN6044-0014



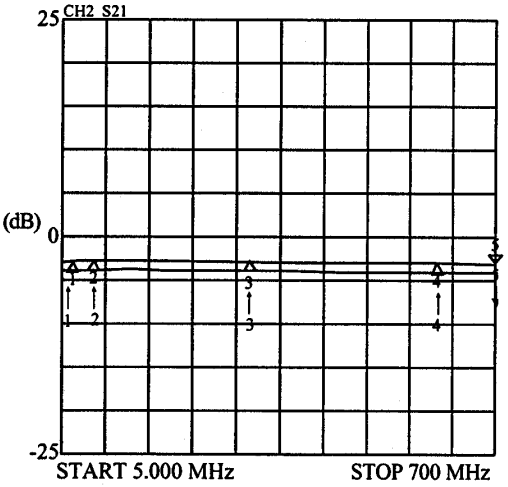
"△" : IN-OUT 1

① -0.4321 dB / 6 MHz
② -0.3222 dB / 50 MHz
③ -0.3882 dB / 300 MHz
④ -0.5890 dB / 600 MHz
⑤ -0.6721 dB / 700 MHz

" ↑ " : IN-OUT 2

① -15.765 dB / 6 MHz
② -15.736 dB / 50 MHz
③ -15.829 dB / 300 MHz
④ -15.942 dB / 600 MHz
⑤ -15.962 dB / 700 MHz

BRN6044-0015

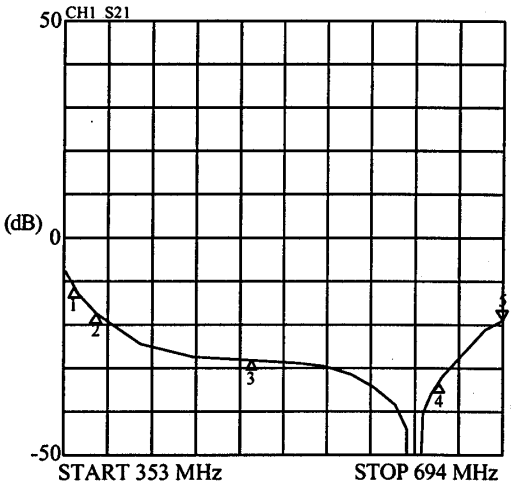


"△" : IN-OUT 1

① -3.3367 dB / 20 MHz
② -3.3328 dB / 50 MHz
③ -3.6748 dB / 300 MHz
④ -4.0316 dB / 600 MHz
⑤ -4.0401 dB / 700 MHz

" ↑ " : IN-OUT 2

① -3.6766 dB / 20 MHz
② -3.6122 dB / 50 MHz
③ -3.9403 dB / 300 MHz
④ -4.1138 dB / 600 MHz
⑤ -3.8037 dB / 700 MHz



"△" : OUT 1-OUT 2

① -12.229 dB / 20 MHz
② -17.753 dB / 50 MHz
③ -27.348 dB / 300 MHz
④ -33.705 dB / 600 MHz
⑤ -18.530 dB / 700 MHz

Bourns Inductive Solution