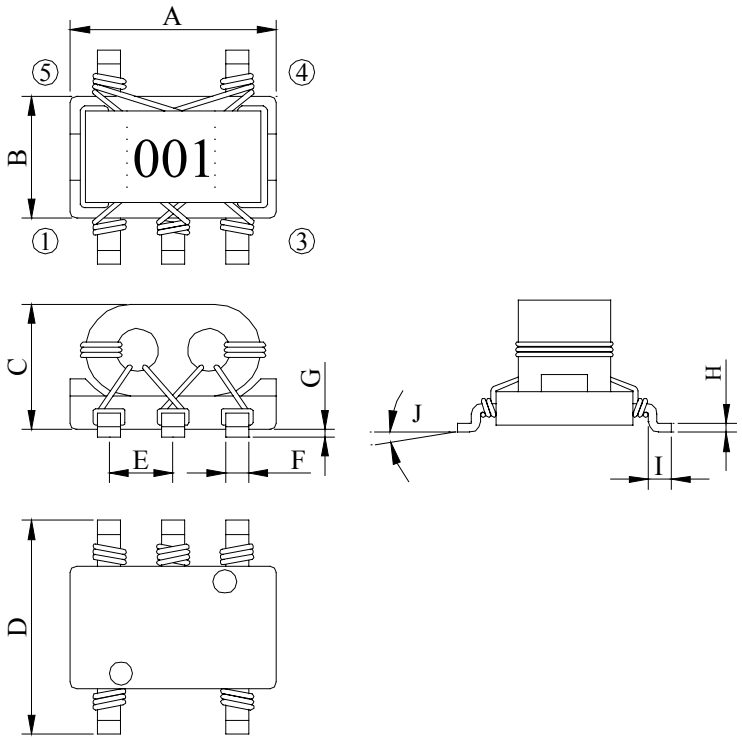
SPECIFICATION FOR APPROVAL

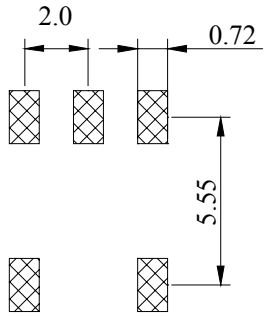
REF :

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

Ⅰ．MECHANICAL DIMENSIONS：



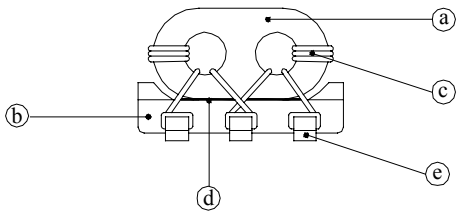
A : 6.20±0.20 m/m
B : 4.00±0.20 m/m
C : 4.40 max. m/m
D : 6.40±0.30 m/m
E : 2.00 typ. m/m
F : 0.60±0.05 m/m
G : 0.20±0.10 m/m
H : 0.30±0.10 m/m
I : 0.70±0.05 m/m
J : 0°～ 8° m/m



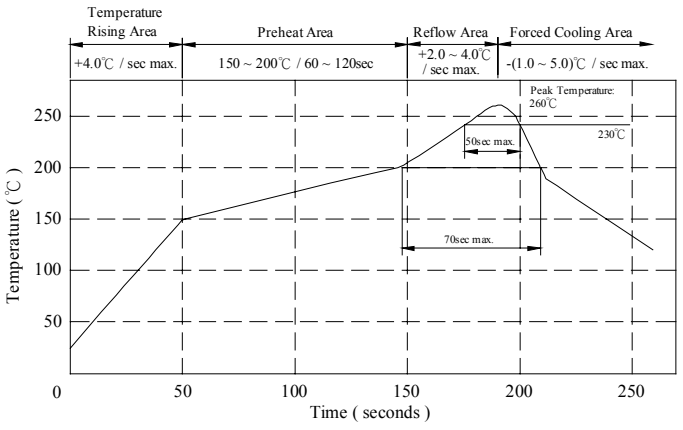
(PCB Pattern)

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

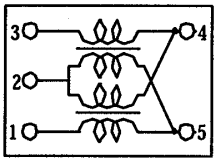
REF :

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

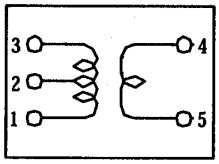
V . ELECTRICAL CHARACTERISTICS :

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

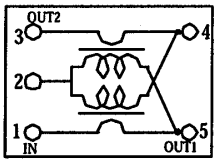
VI . SCHEMATIC DIAGRAM :



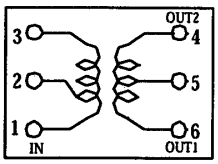
Double balanced mixer
Fig.1



Transformer
Fig.2



Directional coupler
Fig.3



Distributor
Fig.4

Bourns Inductive Solution

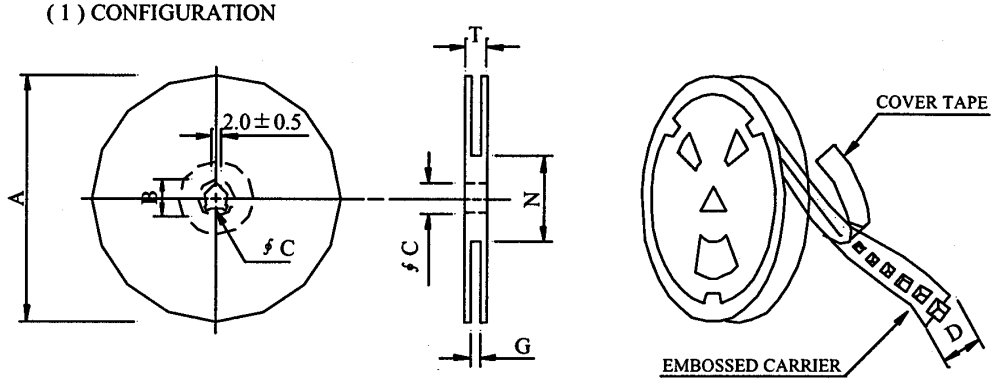
SPECIFICATION FOR APPROVAL

REF :

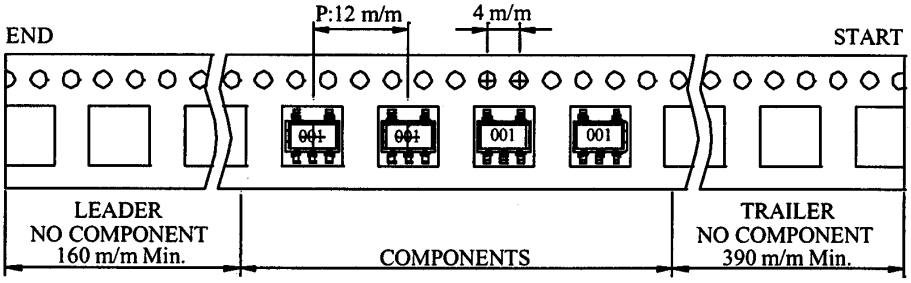
PROD. NAME	SMD BALUN TRANSFORMER	DWG NO.	BRN6044 Series
		ITEM NO.	

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

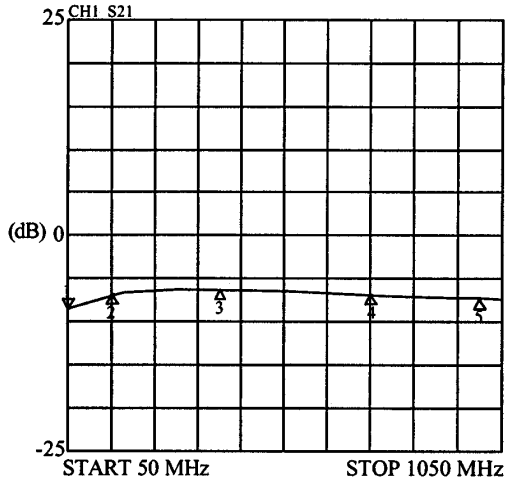
SPECIFICATION FOR APPROVAL

REF :

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

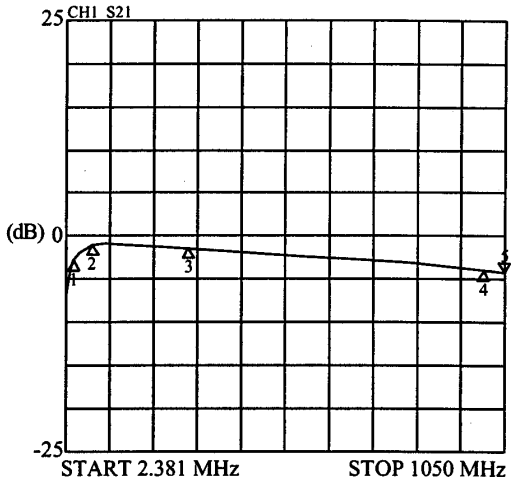
X . INSERTION LOSS TEST CURVE :

BRN6044-0001



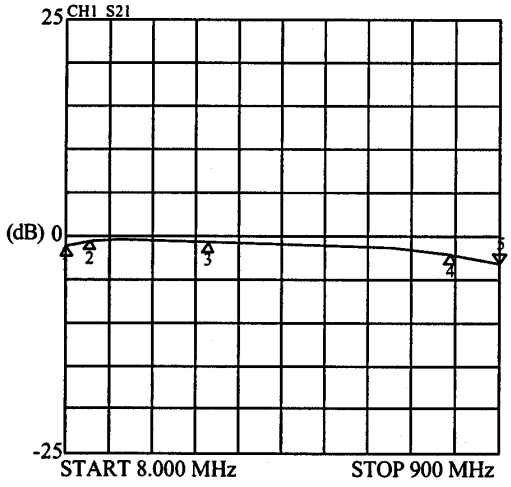
① -8.3183 dB / 50 MHz
② -6.9458 dB / 150 MHz
③ -6.5162 dB / 400 MHz
④ -6.9308 dB / 750 MHz
⑤ -7.2489 dB / 1000 MHz

BRN6044-0002



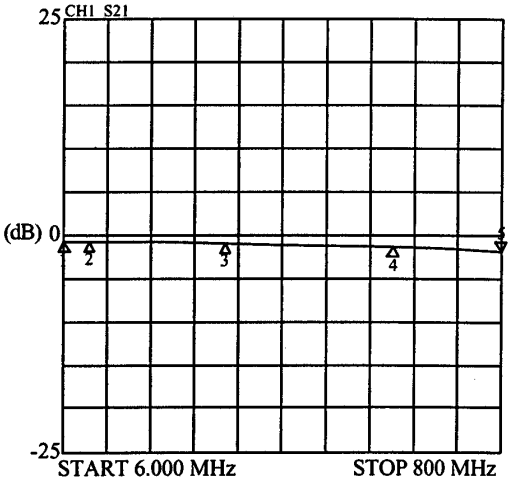
① -3.1380 dB / 10 MHz
② -1.8866 dB / 50 MHz
③ -2.1536 dB / 300 MHz
④ -4.5075 dB / 1000 MHz
⑤ -4.6947 dB / 1050 MHz

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



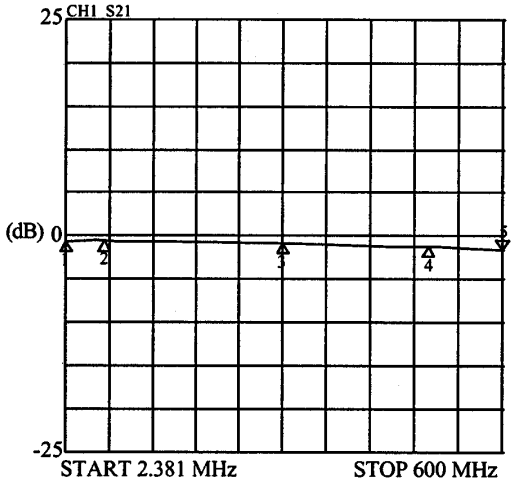
① -0.8196 dB / 6 MHz
② -0.5688 dB / 50 MHz
③ -0.9145 dB / 300 MHz
④ -1.3710 dB / 600 MHz
⑤ -2.2616 dB / 800 MHz

SPECIFICATION FOR APPROVAL

REF :

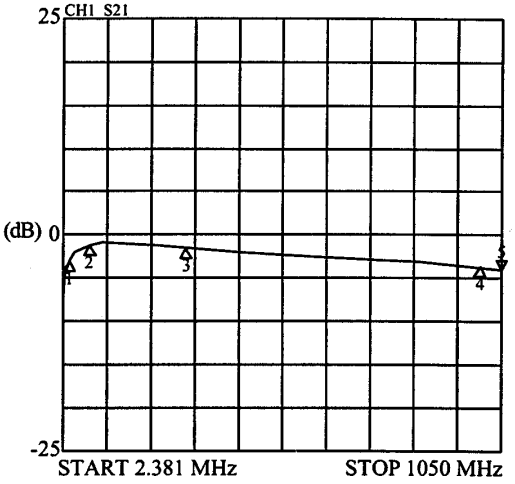
PROD. NAME	SMD BALUN TRANSFORMER	DWG NO.	BRN6044 Series
		ITEM NO.	

BRN6044-0005



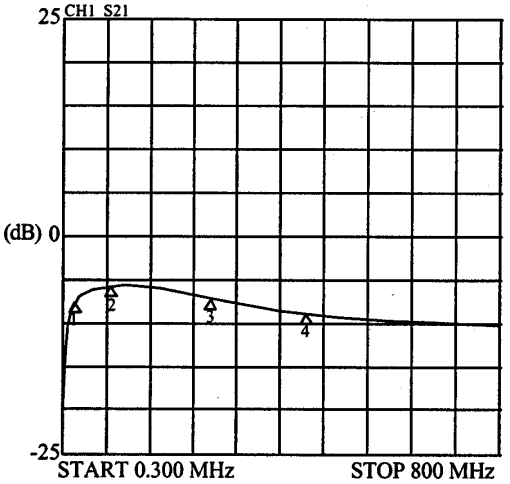
① -0.4705 dB / 5 MHz
② -0.3969 dB / 50 MHz
③ -0.6995 dB / 300 MHz
④ -1.0571 dB / 500 MHz
⑤ -1.5255 dB / 600 MHz

BRN6044-0006



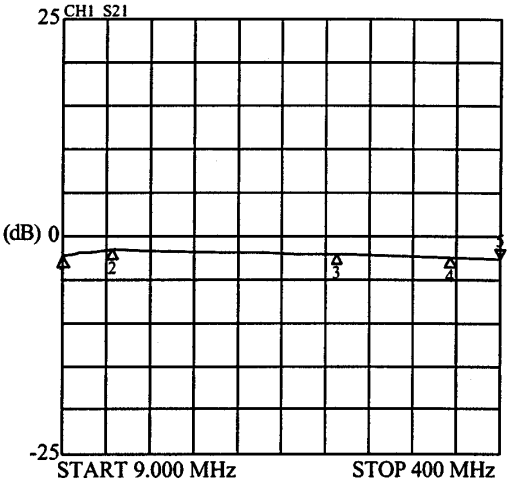
① -3.1380 dB / 10 MHz
② -1.8866 dB / 50 MHz
③ -2.1536 dB / 300 MHz
④ -4.5075 dB / 1000 MHz
⑤ -4.6947 dB / 1050 MHz

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



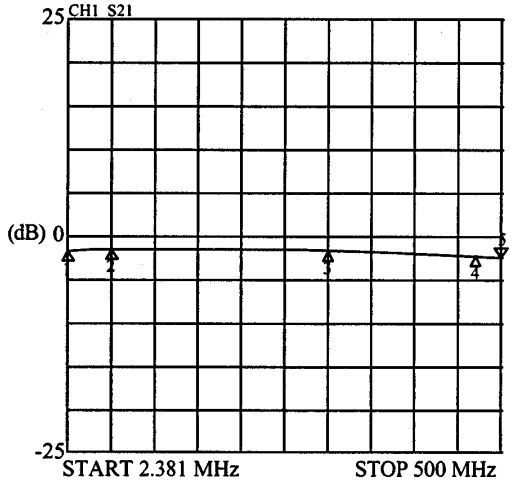
① -2.6066 dB / 9 MHz
② -1.8676 dB / 50 MHz
③ -2.0201 dB / 250 MHz
④ -2.3222 dB / 350 MHz
⑤ -2.5982 dB / 400 MHz

SPECIFICATION FOR APPROVAL

REF :

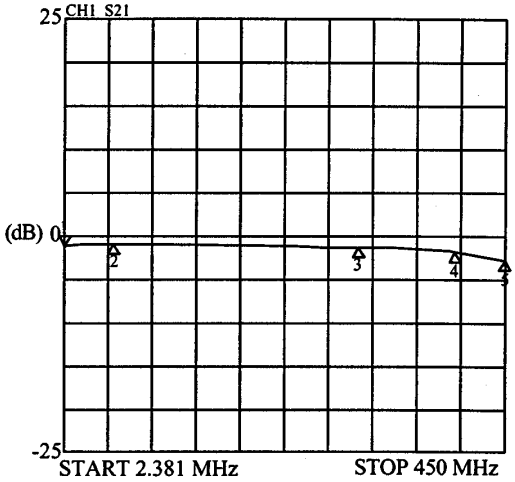
PROD. NAME	SMD BALUN TRANSFORMER	DWG NO.	BRN6044 Series
		ITEM NO.	

BRN6044-0009



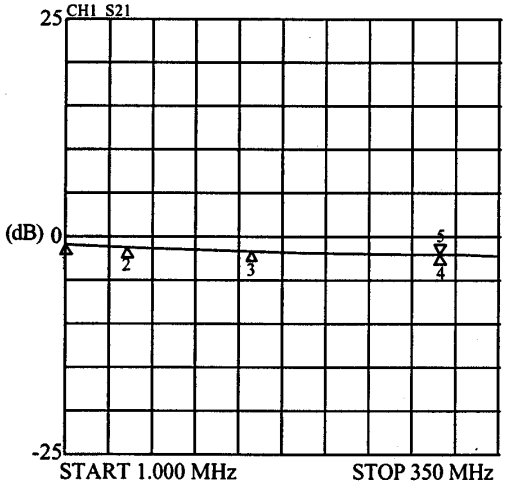
① -1.9681 dB / 3.5 MHz
② -1.3742 dB / 50 MHz
③ -1.6774 dB / 300 MHz
④ -2.1016 dB / 470 MHz
⑤ -2.3843 dB / 500 MHz

BRN6044-0010



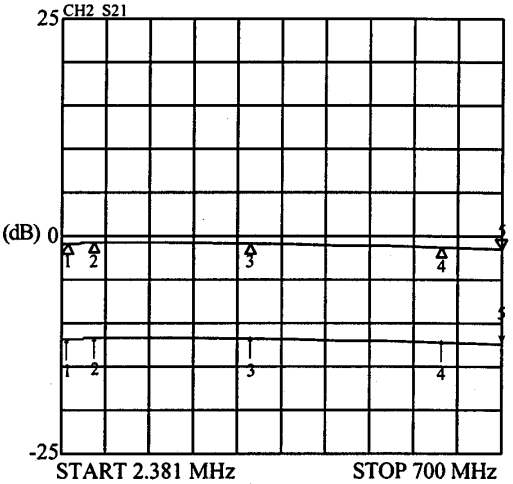
① -0.8878 dB / 2.381 MHz
② -0.7163 dB / 50 MHz
③ -1.2644 dB / 300 MHz
④ -1.9968 dB / 400 MHz
⑤ -3.0278 dB / 450 MHz

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

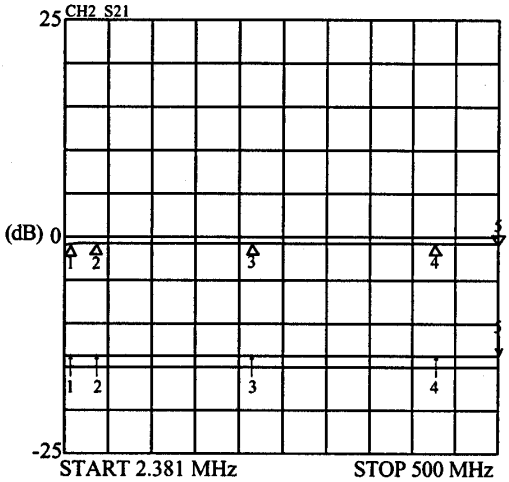
① -12.378 dB / 6 MHz
② -12.303 dB / 50 MHz
③ -12.505 dB / 300 MHz
④ -12.907 dB / 600 MHz
⑤ -13.049 dB / 700 MHz

SPECIFICATION FOR APPROVAL

REF :

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

BRN6044-0013



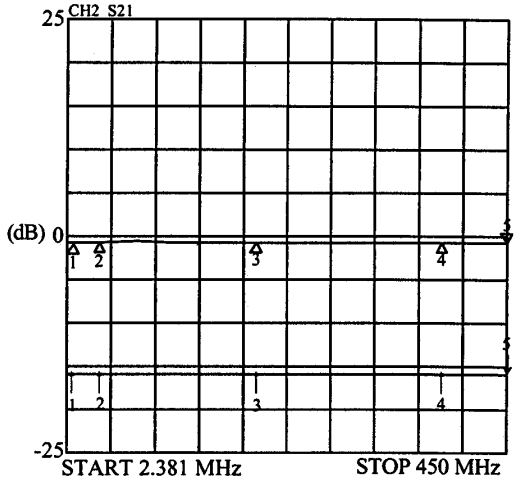
"△" : IN-OUT 1

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



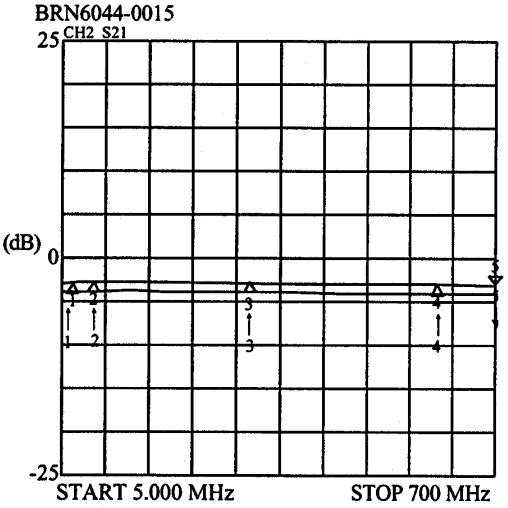
"△" : IN-OUT 1

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

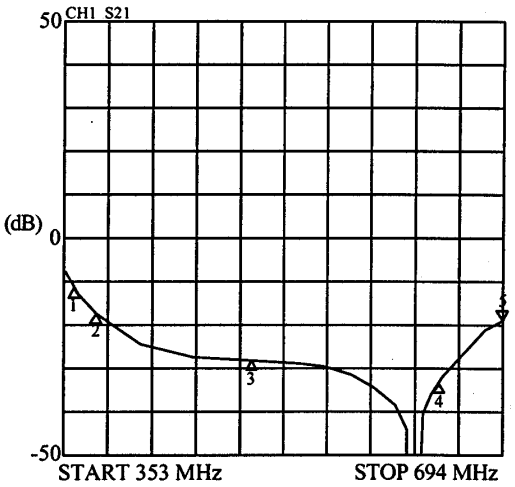


"△" : IN-OUT 1

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