

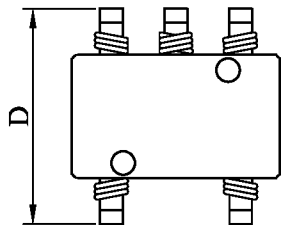
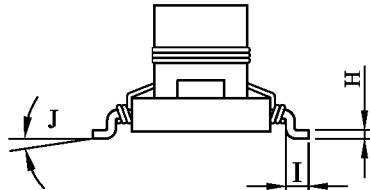
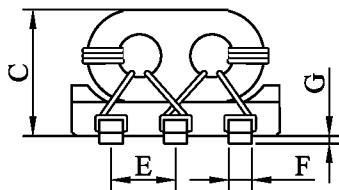
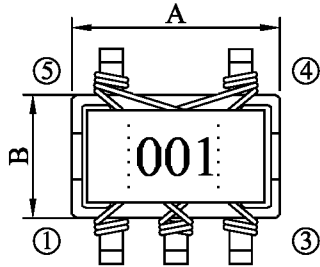
SPECIFICATION FOR APPROVAL

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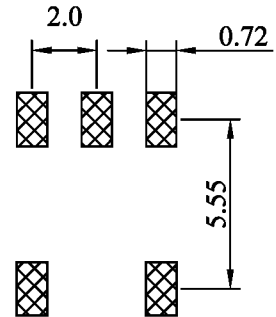
PAGE: 1

PROD. NAME	SMD BALUN TRANSFORMER	ABC'S DWG NO.	SC6044□□□□L□-□□□
		ABC'S ITEM NO.	

I . MECHANICAL DIMENSIONS :



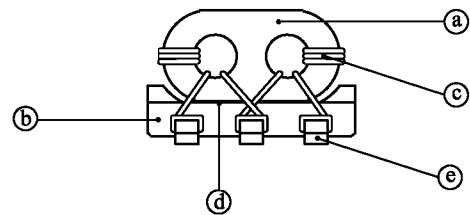
- A : 6.20±0.20 m/m
- B : 4.00±0.20 m/m
- C : 4.40 max. m/m
- D : 6.40±0.30 m/m
- E : 2.00 typ. m/m
- F : 0.60±0.05 m/m
- G : 0.20±0.10 m/m
- H : 0.30±0.10 m/m
- I : 0.70±0.05 m/m
- J : 0° ~ 8° m/m



(PCB Pattern)

II . MATERIALS :

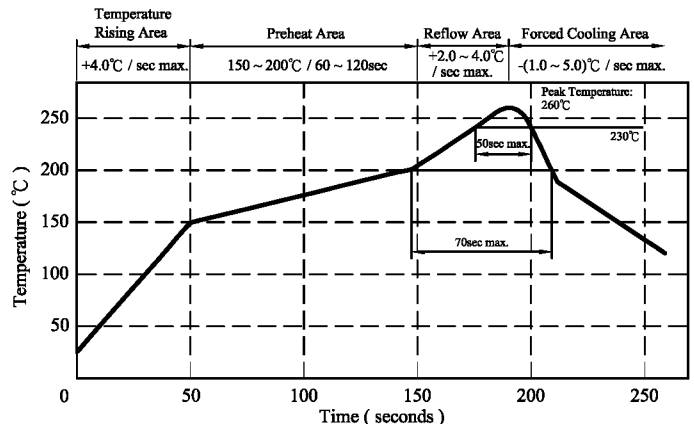
- a. Core : Ferrite RID core
- b. Base : Phenolic
- c. Wire : Enamelled copper wire (class F)
- d. Adhesive : Epoxy resin
- e. Terminal : Cu/Ni/Sn
- f. Remark : Products comply with RoHS' requirements



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

III . APPLICATIONS :

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



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PROD. NAME	SMD BALUN TRANSFORMER	ABC'S DWG NO.	SC6044□□□□L□-□□□
		ABC'S ITEM NO.	

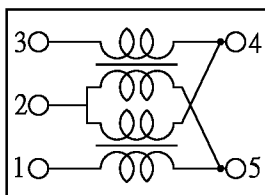
IV . ELECTRICAL CHARACTERISTICS :

DWG No.	Winding turns	Operating Frequency range	Insertion loss	FIG.
SC60440001L□-□□□	1	50.0MHz-400.0MHz	10.0dB max.	1
SC60440002L□-□□□	2	10.0MHz- 1.0GHz	6.0dB max.	1
SC60440003L□-□□□	3	8.0MHz-800.0MHz	3.5dB max.	1
SC60440004L□-□□□	4	6.0MHz-600.0MHz	2.5dB max.	1
SC60440005L□-□□□	5	5.0MHz-500.0MHz	2.0dB max.	1
SC60440006L□-□□□	2	400.0MHz- 1.3GHz	4.0dB max.	1
SC60440007L□-□□□	Pri 1x2 Sec 1	25.0MHz-450.0MHz	8.0dB max.	2
SC60440008L□-□□□	Pri 2x2 Sec 2	9.0MHz-350.0MHz	3.0dB max.	2
SC60440009L□-□□□	Pri 3x2 Sec 3	3.5MHz-470.0MHz	3.0dB max.	2
SC60440010L□-□□□	Pri 4x2 Sec 4	2.2MHz-400.0MHz	3.0dB max.	2
SC60440011L□-□□□	Pri 5x2 Sec 5	1.5MHz-300.0MHz	3.0dB max.	2
SC60440012L□-□□□	4	6.0MHz-600.0MHz	IN to OUT-1 1.3dB max. IN to OUT-2 11dB~14dB	3
SC60440013L□-□□□	5	6.0MHz-600.0MHz	IN to OUT-1 0.9dB max. IN to OUT-2 13dB~16dB	3
SC60440014L□-□□□	6	6.0MHz-600.0MHz	IN to OUT-1 0.8dB max. IN to OUT-2 15dB~17dB	3
SC60440015L□-□□□		20.0MHz-600.0MHz	IN to OUT-1,2 4.5dB max. OUT-1 to OUT-2 (ISOLATION) 10dB min.	4

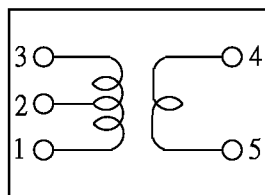
1). □ : Packaging information ... [A]: Bulk [B]: Taping Reel

2). "-□□□":Reference code

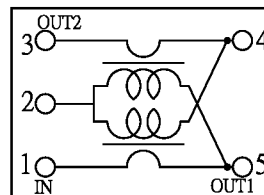
V . SCHEMATIC DIAGRAM :



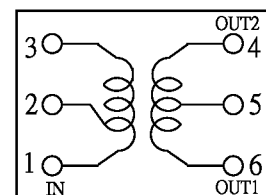
Double balanced mixer
Fig.1



Transformer
Fig.2



Directional coupler
Fig.3



Distributor
Fig.4

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SPECIFICATION FOR APPROVAL

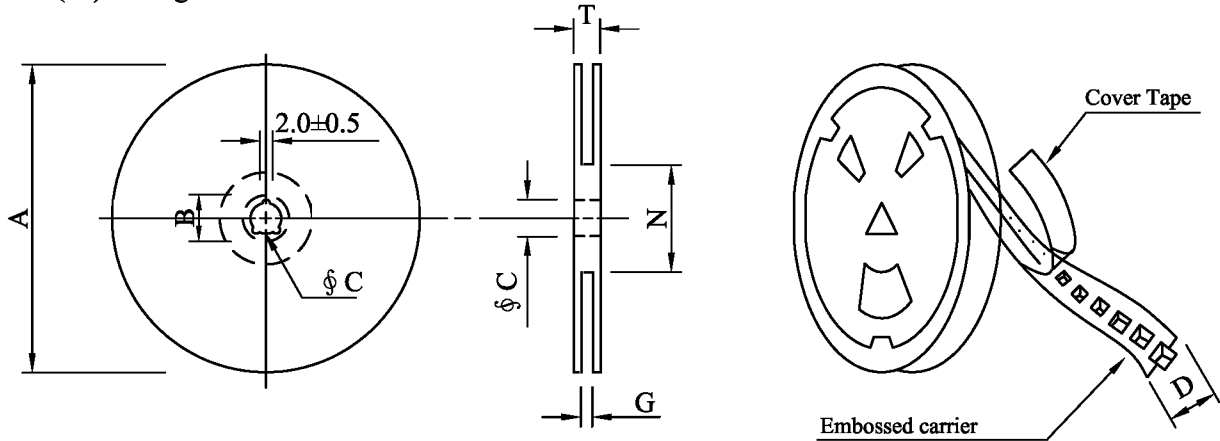
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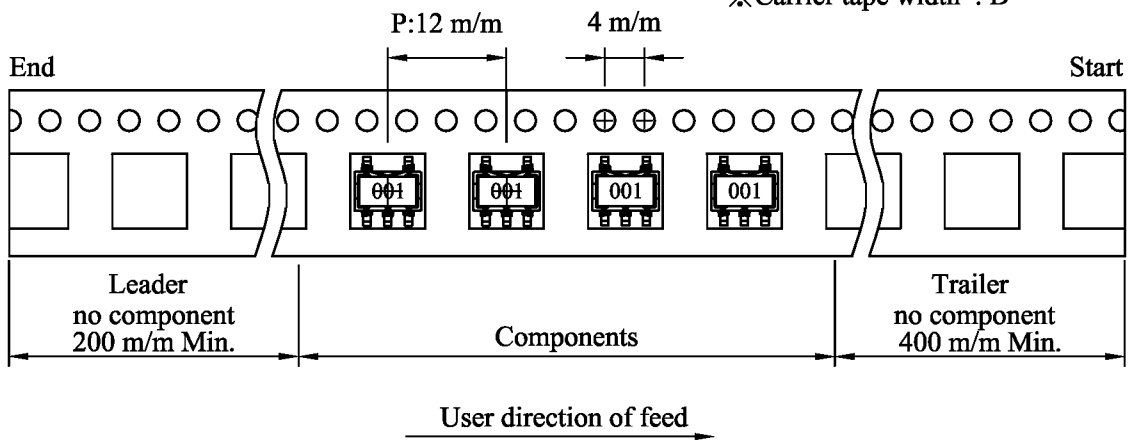
PROD. NAME	SMD BALUN TRANSFORMER	ABC'S DWG NO.	SC6044□□□□L□-□□□
		ABC'S ITEM NO.	

VI . PACKAGING INFORMATION :

(1) Configuration



※Carrier tape width : D



(2) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
13 - 16	330	21±0.8	13±0.5	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)
SC6044	1,000	450	13 - 16	6,000	3.5	40 x 40 x 24

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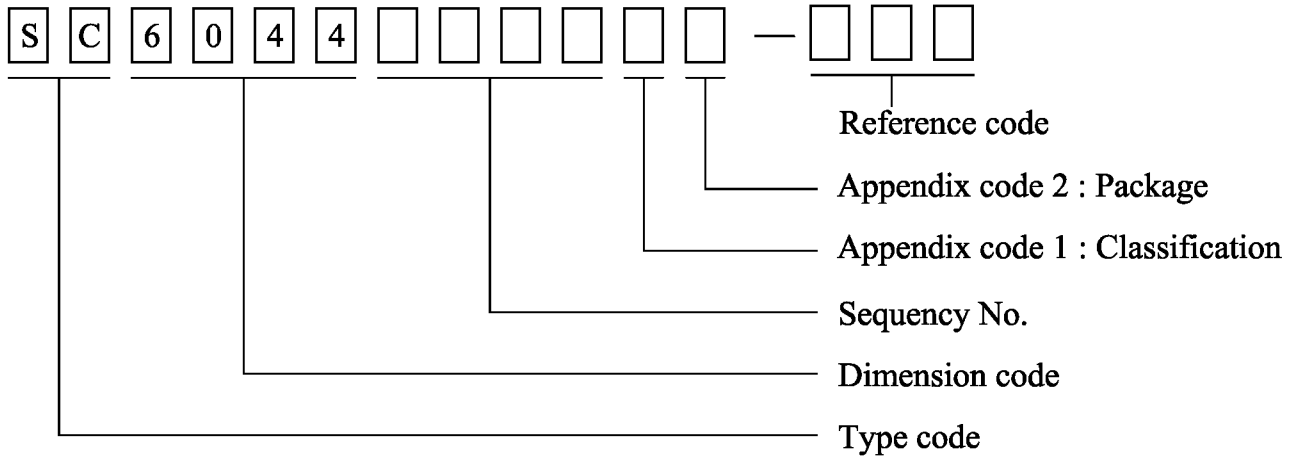
SPECIFICATION FOR APPROVAL

REF :

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PROD. NAME	SMD BALUN TRANSFORMER	ABC'S DWG NO.	SC6044□□□□L□-□□□
		ABC'S ITEM NO.	

VII . DWGING NUMBER EXPRESSION :



Appendix code 1 : Product Classification

L : Lead Free Standard products comply with RoHS' requirements

1 ~ 9 : Lead Free Special products comply with RoHS' requirements

Appendix code 2 : Package Information

Code	Inner package	Inner package Q'TY	Remark
A	T.B.D.	T.B.D.	
B	T / R (Reel package)	1000 pcs	

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PROD. NAME	SMD BALUN TRANSFORMER	ABC'S DWG NO.	SC6044□□□□L□-□□□
		ABC'S ITEM NO.	

VIII . UL CARD :

OBMW2 September 8, 2000
Magnet Wire-Component
JUNG SHING WIRE CO LTD E174837
231 CHUNG CHENG RD, SEC 3 JEN-TEH HSIANG, TAINAN
HSIEN TAIWAN

Mtl Dsg	Mark Dsg	BC	Coat Typ	OC	ANSI Type	Temp Class
AIW	---	Polyamideimide		---	MW81-C	220
CFUEWB	---	Polyurethane		---	MW75C	130
EIAIW	---	Polyesterimide		Polyamideimide	MW35C	200
EILOCKY	---	Polyesterimide		Polyamide	---	180
EILOCKW	---	Polyesterimide		Modified Epoxy	---	200
EIW	---	Polyesterimide		---	---	220
EIW-2	---	Polyesterimide		---	MW74-C	200
FL.EILOCKY	---	Modified Polyester		Polyamide	---	155
LSFFW	---	Polyurethane		---	MW79-C	155
LSUEW	---	Polyurethane		---	---	130
PEW	---	Polyester		---	---	155
PEY	---	Polyester		Nylon	MW24-C	155
SF.FLW	---	Modified Polyester		---	MW26C	155
SF.EIW	---	Polyesterimide		---	MW77C	180
SF.BY@	---	Modified Polyester		Nylon	MW27-C	155
SF.FLY@	---	Modified Polyester		Nylon	MW27-C	155
SF.BLOCKBS	---	Modified Polyester		Modified Polyamide	---	155
SF.EILOCKY#	---	Polyesterimide		Polyamide	---	180
SF.EILOCKBS	---	Polyesterimide		Modified Polyamide	---	180
SF.BW@	---	Modified Polyester		---	MW26C	155
SFFW	---	Polyurethane		---	MW79	155

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dedicated to public safety and
committed to quality service

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Mtl Dsg	Mark Dsg	BC	Coat Typ	OC	ANSI Type	Temp Class
SFFY	---	Polyurethane		Polyamide	MW80C	155
UEW-1	---	Polyurethane		---	MW2-C	105
UEW-2	---	Polyurethane		---	---	130
UEW-4	---	Polyurethane		---	MW75C	130
UEY	---	Polyurethane		Nylon	MW28-C	130
UEY-2	---	Polyurethane		Polyamide	MW28-C	130

@-May be suffixed by LZ; # - May be suffixed by LZ, EL or LZI.
LZ - Signifies magned wires twisted together; EL - signifies base coated magnet wire laid parallel with top coat applied overall; LZL - signi-
fies base coated magnet wire twisted together and covered with top coat overall.

Marking: Company name or trademarks **JSW** or 榮星電線, material designation or marked designation on packaed or reel, and
Recognized Component Mark.

See General Information Preceding These Recognitions
For use only in equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

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September 8, 2000

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PROD. NAME	SMD BALUN TRANSFORMER	ABC'S DWG NO.	SC6044□□□□L□-□□□
		ABC'S ITEM NO.	

		SUMITOMO CHEMICAL CO LTD					E54705 (M)				
		5-33 KITAHAMA 4-CHOME CHUO-KO, OSAKA JAPAN									
Mtl Dsg	Col	Min Thk mm	UL94 Flame Class	Elec	RTI		H W I	H A I	H V T R	D 4 9 5	C T I
					with Imp	w/o Imp					
Liquid crystal polyester (LCP), designated "EKONOL" or "SUMIKASUPER", furnished in the form of pellets, (Contd)											
E4008, E400X	NC, BK	0.30	94V-0	130	130	130	—	—	—	—	—
		0.75	94V-0	130	130	130	3	4	—	—	—
		1.5	94V-0	130	130	130	2	4	—	—	—
		3.0	94V-0	130	130	130	1	4	0	5	4
E4008	NC, WT, BK	0.30	94V-0	130	130	130	—	—	—	—	—
		0.75	94V-0	220	180	220	3	4	—	—	—
		1.5	94V-0	220	200	240	2	4	—	—	—
		3.0	94V-0	220	200	240	1	4	0	5	4
E4010	NC, BK	0.30	94V-0	130	130	130	—	—	—	—	—
		0.75	94V-0	220	180	220	3	4	—	—	—
		1.5	94V-0	220	200	240	2	4	—	—	—
		3.0	94V-0	220	200	240	1	4	0	5	4
E400(Y)L, E4008L	NC, BK	0.30	94V-0	130	130	130	—	—	—	—	—
		0.75	94V-0	130	130	130	3	4	—	—	—
		1.5	94V-0	130	130	130	2	4	—	—	—
		3.0	94V-0	130	130	130	1	4	0	5	4
E4810	NC, BK	0.30	94V-0	130	130	130	—	—	—	—	—
		0.75	94V-0	130	130	130	0	4	—	—	—
		1.5	94V-0	130	130	130	0	4	—	—	—
		3.0	94V-0	130	130	130	1	4	0	5	4

(X) Denotes any number 1 thru 9.
(Y) Denotes any number 1 thru 7.

SPECIFICATION FOR APPROVAL

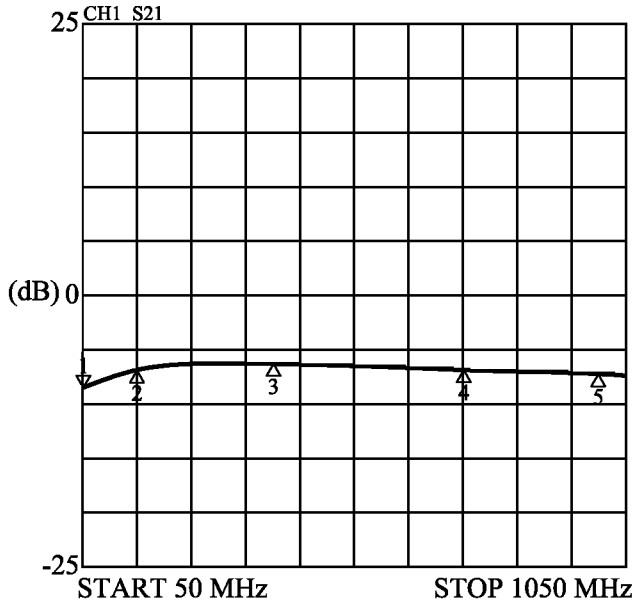
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PROD. NAME	SMD BALUN TRANSFORMER	ABC'S DWG NO.	SC6044□□□□L□-□□□
		ABC'S ITEM NO.	

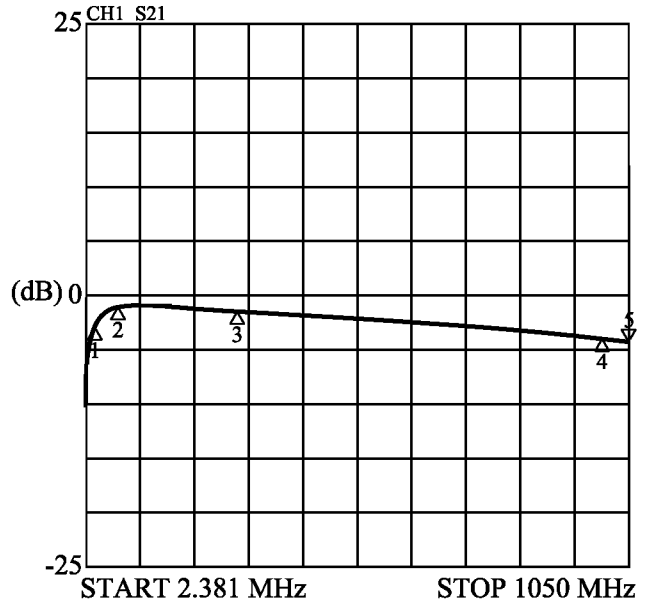
IX . INSERTION LOSS TEST CURVE :

SC60440001



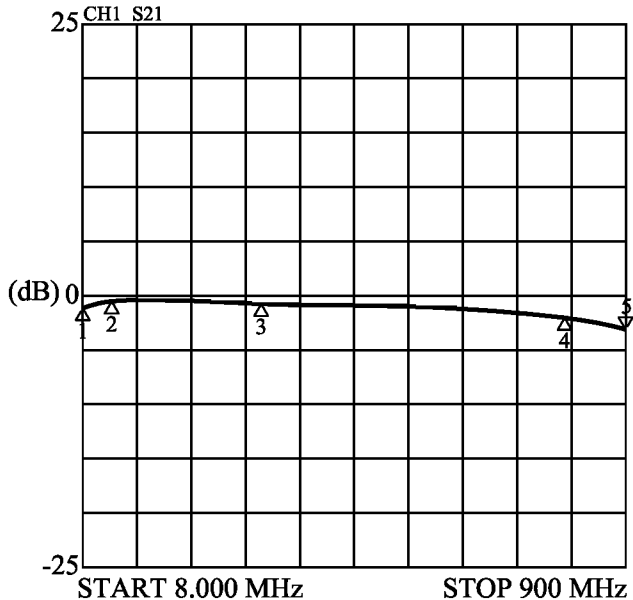
- ① -8.3183 dB / 50 MHz
- ② -6.9458 dB / 150 MHz
- ③ -6.5162 dB / 400 MHz
- ④ -6.9308 dB / 750 MHz
- ⑤ -7.2489 dB / 1000 MHz

SC60440002



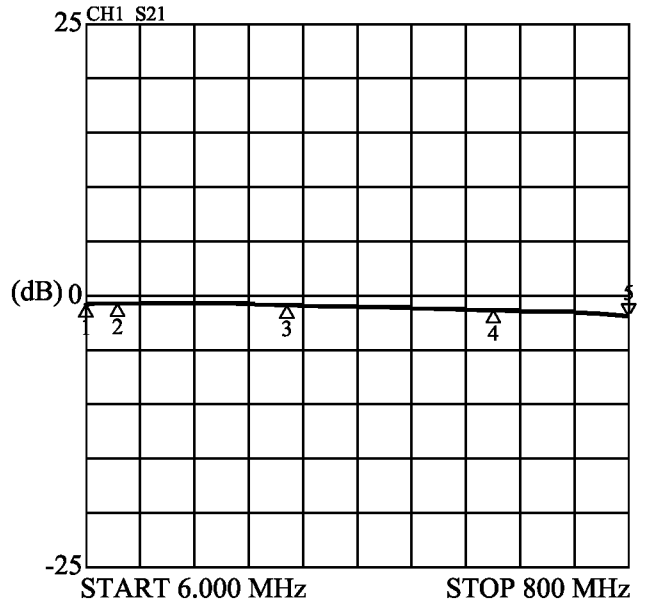
- ① -3.1380 dB / 10 MHz
- ② -1.8866 dB / 50 MHz
- ③ -2.1536 dB / 300 MHz
- ④ -4.5075 dB / 1000 MHz
- ⑤ -4.6947 dB / 1050 MHz

SC60440003



- 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

SC60440004



- 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

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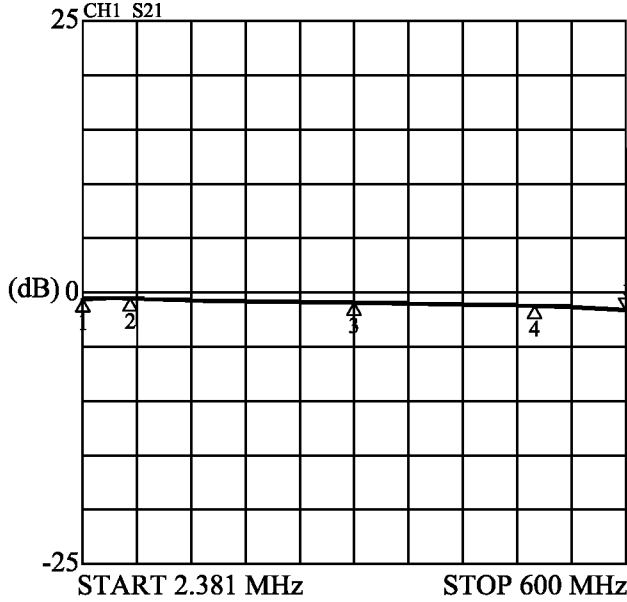
SPECIFICATION FOR APPROVAL

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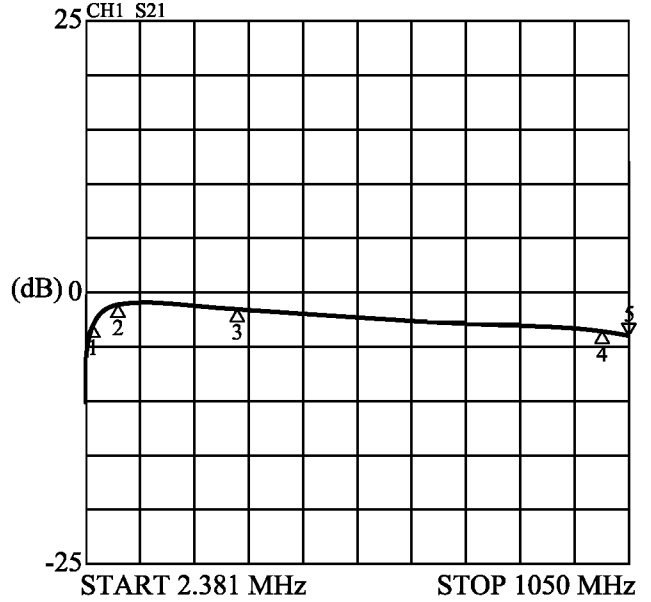
PROD. NAME	SMD BALUN TRANSFORMER	ABC'S DWG NO. ABC'S ITEM NO.	SC6044□□□□L□-□□□
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SC60440005



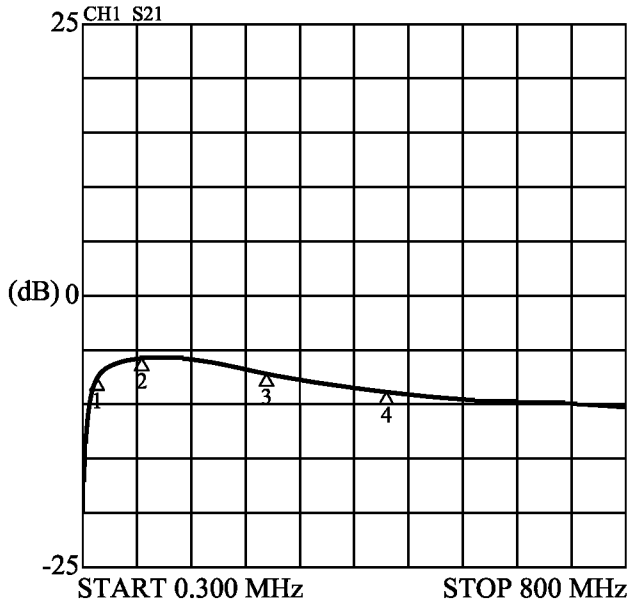
- ① -0.4705 dB / 5 MHz
- ② -0.3969 dB / 50 MHz
- ③ -0.6995 dB / 300 MHz
- ④ -1.0571 dB / 500 MHz
- ⑤ -1.5255 dB / 600 MHz

SC60440006



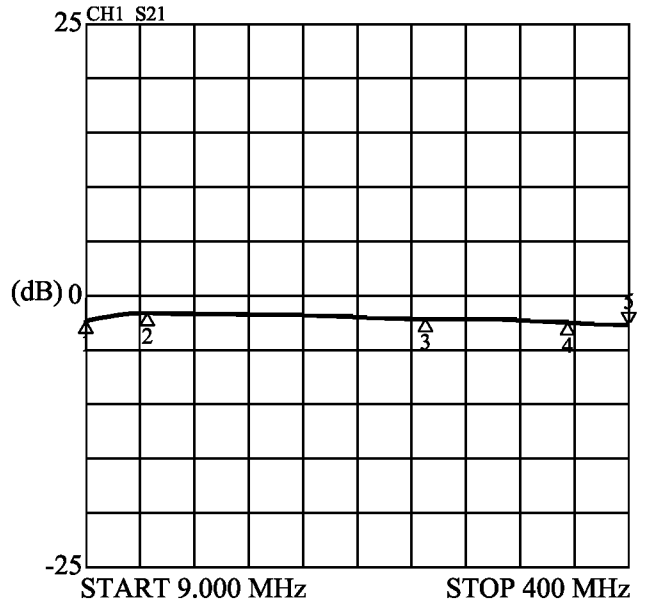
- ① -3.1380 dB / 10 MHz
- ② -1.8866 dB / 50 MHz
- ③ -2.1536 dB / 300 MHz
- ④ -4.5075 dB / 1000 MHz
- ⑤ -4.6947 dB / 1050 MHz

SC60440007



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

SC60440008



- 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

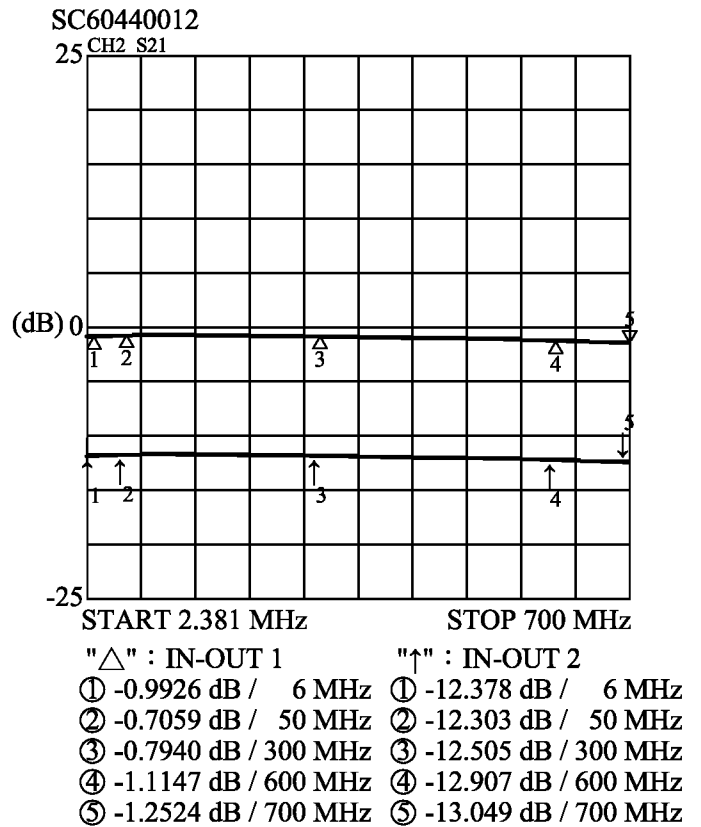
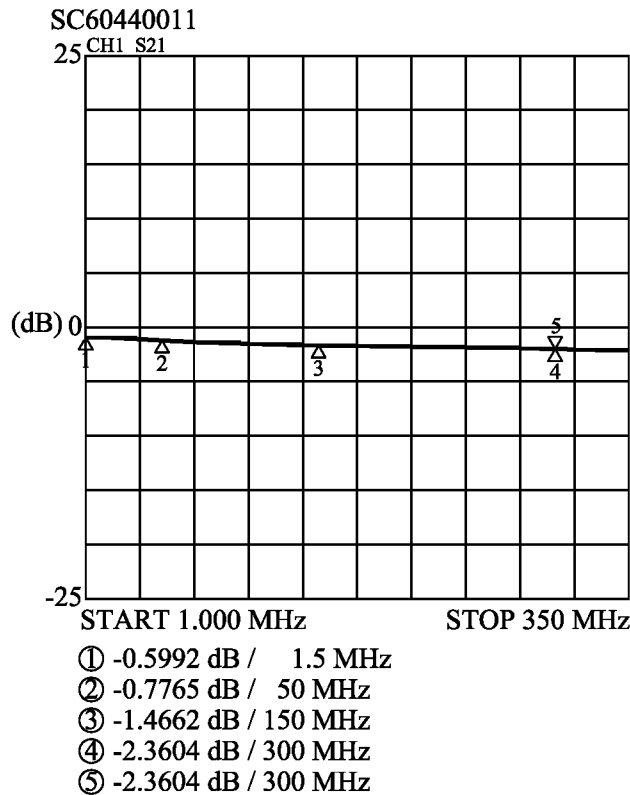
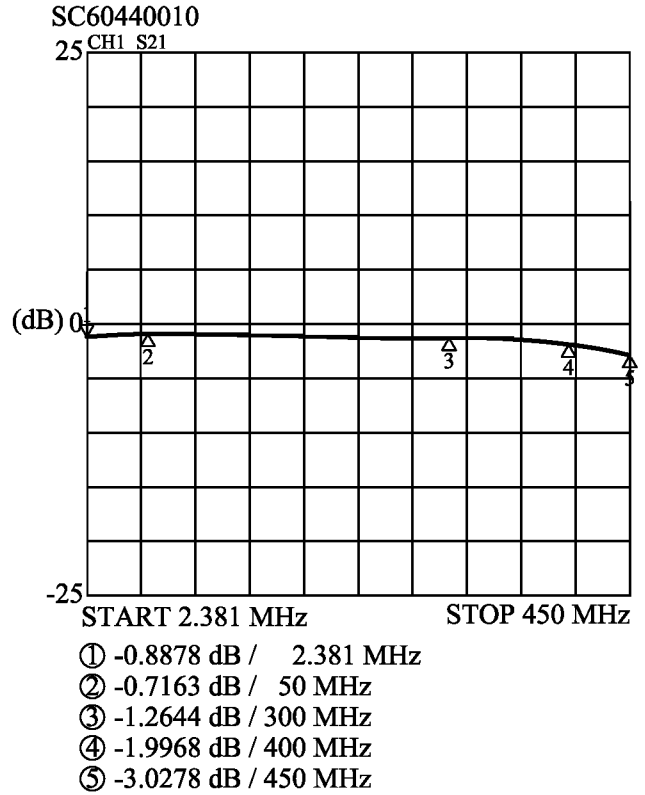
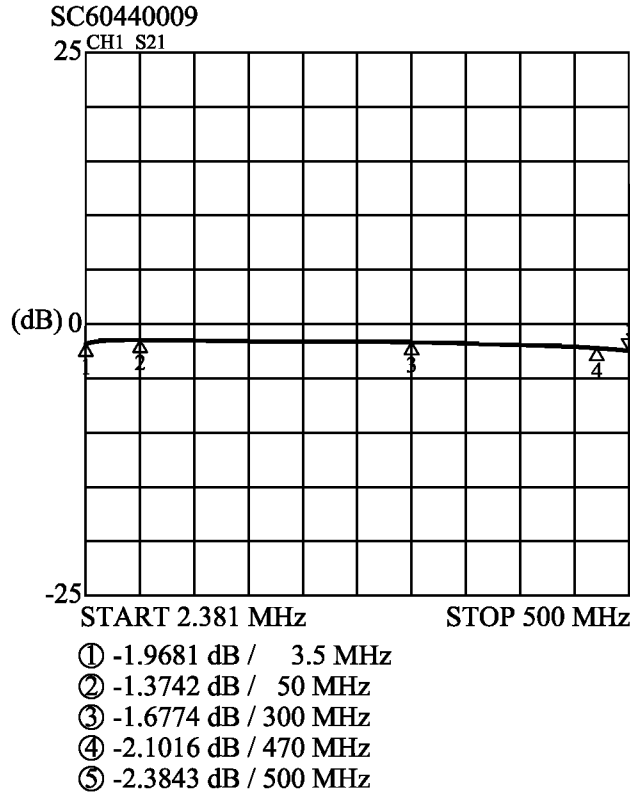
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PROD. NAME	SMD BALUN TRANSFORMER	ABC'S DWG NO.	SC6044□□□□L□-□□□
		ABC'S ITEM NO.	



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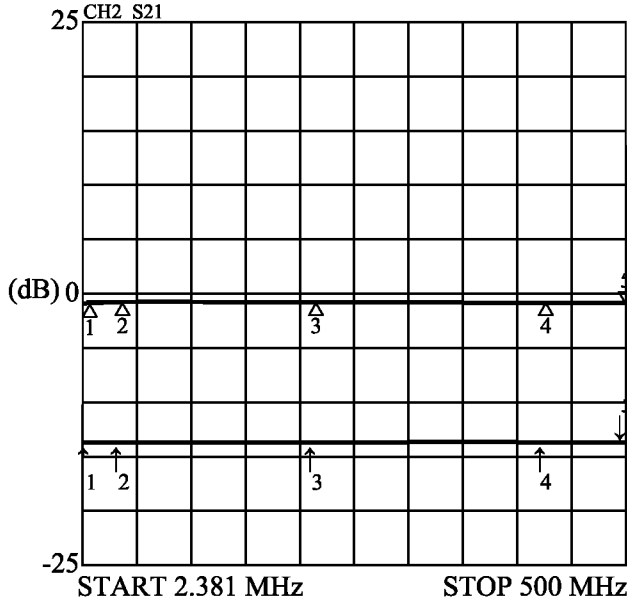
SPECIFICATION FOR APPROVAL

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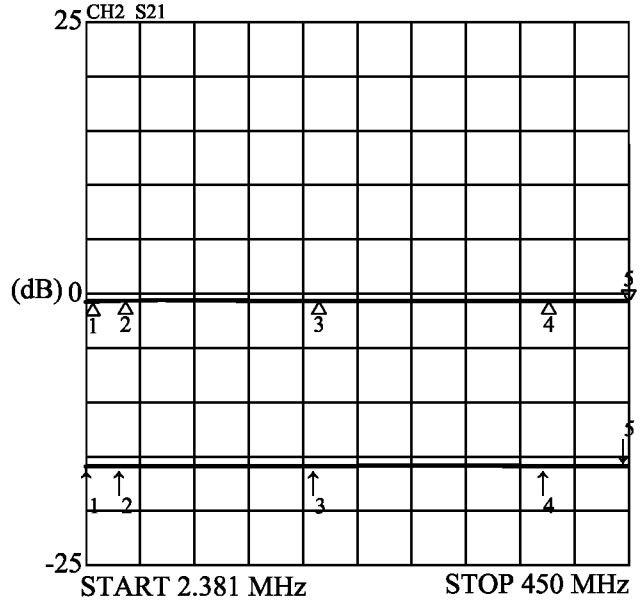
PROD. NAME	SMD BALUN TRANSFORMER	ABC'S DWG NO.	SC6044□□□□L□-□□□
		ABC'S ITEM NO.	

SC60440013



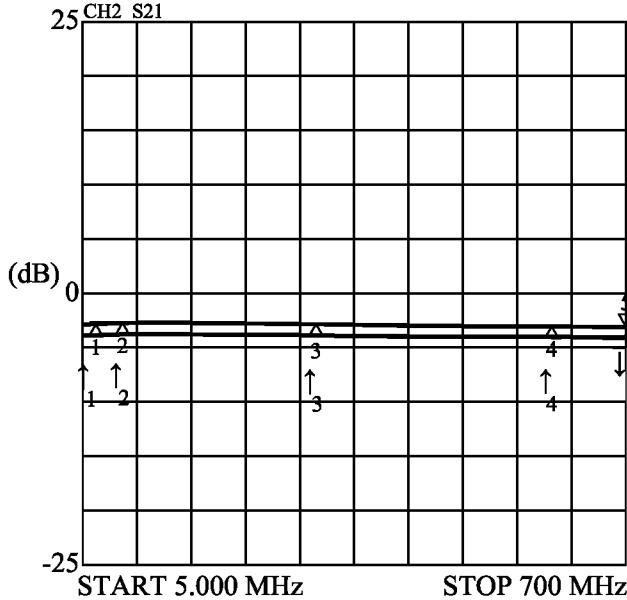
- | | | | |
|------------------------|------------------------|------------------------|------------------------|
| "△" : IN-OUT 1 | | "↑" : IN-OUT 2 | |
| ① -0.6377 dB / 6 MHz | ① -14.222 dB / 6 MHz | ① -0.4321 dB / 6 MHz | ① -15.765 dB / 6 MHz |
| ② -0.4683 dB / 50 MHz | ② -14.177 dB / 50 MHz | ② -0.3222 dB / 50 MHz | ② -15.736 dB / 50 MHz |
| ③ -0.5063 dB / 300 MHz | ③ -14.254 dB / 300 MHz | ③ -0.3882 dB / 300 MHz | ③ -15.829 dB / 300 MHz |
| ④ -0.6722 dB / 600 MHz | ④ -14.309 dB / 600 MHz | ④ -0.5890 dB / 600 MHz | ④ -15.942 dB / 600 MHz |
| ⑤ -0.7370 dB / 700 MHz | ⑤ -14.300 dB / 700 MHz | ⑤ -0.6721 dB / 700 MHz | ⑤ -15.962 dB / 700 MHz |

SC60440014



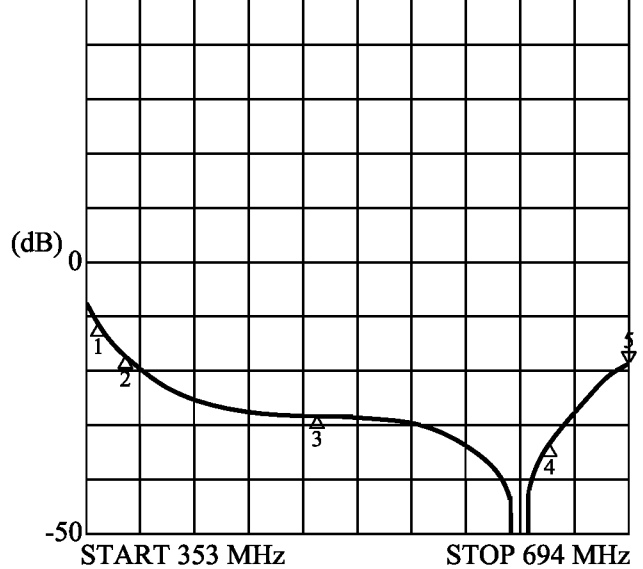
- | | | | |
|------------------------|------------------------|------------------------|------------------------|
| "△" : IN-OUT 1 | | "↑" : IN-OUT 2 | |
| ① -0.4321 dB / 6 MHz | ① -15.765 dB / 6 MHz | ① -0.4321 dB / 6 MHz | ① -15.765 dB / 6 MHz |
| ② -0.3222 dB / 50 MHz | ② -15.736 dB / 50 MHz | ② -0.3222 dB / 50 MHz | ② -15.736 dB / 50 MHz |
| ③ -0.3882 dB / 300 MHz | ③ -15.829 dB / 300 MHz | ③ -0.3882 dB / 300 MHz | ③ -15.829 dB / 300 MHz |
| ④ -0.5890 dB / 600 MHz | ④ -15.942 dB / 600 MHz | ④ -0.5890 dB / 600 MHz | ④ -15.942 dB / 600 MHz |
| ⑤ -0.6721 dB / 700 MHz | ⑤ -15.962 dB / 700 MHz | ⑤ -0.6721 dB / 700 MHz | ⑤ -15.962 dB / 700 MHz |

SC60440015



- | | | | |
|------------------------|------------------------|------------------------|------------------------|
| "△" : IN-OUT 1 | | "↑" : IN-OUT 2 | |
| ① -3.3367 dB / 20 MHz | ① -3.6766 dB / 20 MHz | ① -3.3367 dB / 20 MHz | ① -3.6766 dB / 20 MHz |
| ② -3.3328 dB / 50 MHz | ② -3.6122 dB / 50 MHz | ② -3.3328 dB / 50 MHz | ② -3.6122 dB / 50 MHz |
| ③ -3.6748 dB / 300 MHz | ③ -3.9403 dB / 300 MHz | ③ -3.6748 dB / 300 MHz | ③ -3.9403 dB / 300 MHz |
| ④ -4.0316 dB / 600 MHz | ④ -4.1138 dB / 600 MHz | ④ -4.0316 dB / 600 MHz | ④ -4.1138 dB / 600 MHz |
| ⑤ -4.0401 dB / 700 MHz | ⑤ -3.8037 dB / 700 MHz | ⑤ -4.0401 dB / 700 MHz | ⑤ -3.8037 dB / 700 MHz |

50 CH1 S21



- | | |
|------------------------|------------------------|
| "△" : OUT 1-OUT 2 | |
| ① -12.229 dB / 20 MHz | ① -12.229 dB / 20 MHz |
| ② -17.753 dB / 50 MHz | ② -17.753 dB / 50 MHz |
| ③ -27.348 dB / 300 MHz | ③ -27.348 dB / 300 MHz |
| ④ -33.705 dB / 600 MHz | ④ -33.705 dB / 600 MHz |
| ⑤ -18.530 dB / 700 MHz | ⑤ -18.530 dB / 700 MHz |

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