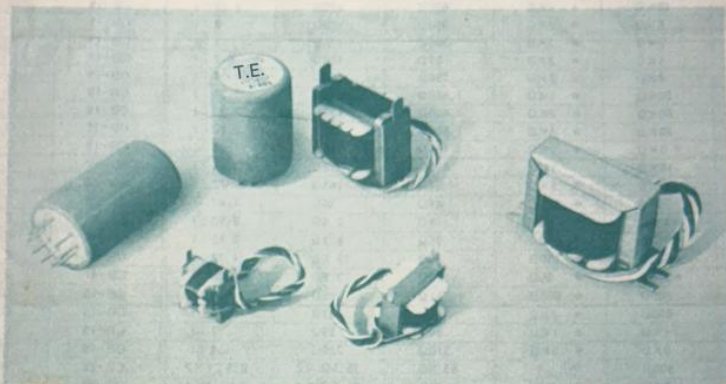


**Sansui**

# audio transformer for transistor



## audio transformer for transistor

Sansui's transistor transformers have been widely used for many years since the advent of transistors, and the range of demand is expanding. With the motto of compact size, high performance, and ease of use, we have developed new models to further meet your needs, and we would like to introduce them to you as a culmination of our existing models. 21-80

(⊙ indicates new products)

**standard**

● Transformer for cartridge microphone

Product name	Next	secondary	turns ratio	gain	shape	Weight (gr)	
A-603	For MC type cartridge	300 to 1000	OPEN	1 : 10	19 dB	A-6	43
	for microphone	150 Ω, 600 Ω	50 KΩ				

● driver transformer

Product name	impedance		direct current resistance		shape	Weight (gr)
	next	secondary	primary	secondary		
D-500	500 Ω	30 Ω 30 Ω	51 Ω	3.2 Ω 3.2 large	10~40W transistor Main amplifier (Class B push-pull) CB-52 Rug	350(1)

The secondary impedance is the value for 1 KHz use and the effective voltage between the primary and secondary windings is AC100V.

The markings on the nameplate are of the same polarity.

● ST type input transformer

Product name	impedance		direct current resistance		turns ratio	shape	By lead color	Weight (gr)
	Next	secondary	next	ni next				
ST-11	20 KΩ	1 KΩ	670 Ω	78 Ω	4.49 : 1	CBL-12	A	7
ST-12	100 KΩ	1 KΩ	1,270 Ω	45 Ω	10 : 1	CBL-12	A	7
ST-14	500 KΩ	1 KΩ	June 2002	32 Ω	22.4 : 1	CB-19	A	13

DC resistance tolerance ±20%

**Sansui Electric Co., Ltd.**

● ST type driver transformer

name	impedance		DC resistance		turns ratio	shape	By lead color	Weight (gr)
	—	next = next	— Next	— Next				
ST-17	25 KΩ	*10KΩ	1,150Ω	570Ω	1.60 : 1	CB-19	C	13
ST-21	10 KΩ	*2KΩ	630Ω	120Ω	2.24 : 1	CB-19	C	13
ST-22	8KΩ	* 2KΩ	390Ω	120Ω	2 : 1	CB-19	C	13
ST-23	2KΩ	* 2KΩ	300Ω	170Ω	1 : 1	CB-19	C	13
ST-24	1KΩ	* 2KΩ	57Ω	160Ω	0.7 : 1	CB-19	C	13
ST-25	4KΩ	* 2KΩ	250Ω	160Ω	1.38 : 1	CB-19	C	13
ST-26	20 KΩ	* 1KΩ	1,600Ω	73Ω	4.38 : 1	CB-19	C	13
ST-27	20 KΩ	*2KΩ	1,600Ω	130Ω	3.13 : 1	CB-19	C	13
ST-28	20 KΩ	*4KΩ	1,600Ω	250Ω	2.20 : 1	CB-19	C	13
ST-29	2.5KΩ	*1.5KΩ	165Ω	110Ω	1.28 : 1	CB-19	C	13
ST-20	10KΩ	1KΩ	470Ω	78Ω	3.16 : 1	CBL-12	A	6.5
ST-52	600Ω	*2KΩ	37Ω	165Ω	0.522 : 1	CB-28	C	59
ST-53	750Ω	*350Ω	41Ω	30Ω	1.43 : 1	CB-28	C	59
ST-54	*400Ω	* 45Ω	19Ω	2.6Ω	2.90 : 1	CB-35	E	84
ST-55	*750Ω	*120Ω	35Ω	8.3Ω	2.42 : 1	CB-35	E	84
ST-56	*500Ω	*150Ω	39Ω	12.5Ω	1.72 : 1	CB-41	E	149
ST-57	*300Ω	* 35Ω	20Ω	3.2Ω	2.76 : 1	CB-41	E	149
ST-71	600Ω	*600Ω	51Ω	55Ω	1 : 1	CB-19	C	14
ST-72	600Ω	* 1KΩ	51Ω	83Ω	0.74 : 1	CB-19	C	14
ST-73	1KΩ	* 1KΩ	84Ω	83Ω	1 : 1	CB-19	C	14
ST-74	6KΩ	*3KΩ	310Ω	210Ω	1.4 : 1	CB-19	C	14
ST-91	900Ω	100Ω × 8 (4,400Ω)	53.5Ω	15.50 × 2	2.9 : 1 × 2	CB-28	H	60
ST-92	1.3KΩ	150Ω × 8 (4,800Ω)	73Ω	21.50 × 2	2.9 : 1 × 2	CB-28	H	60
ST-75	10KΩ	*600Ω	420Ω	21Ω	4.15 : 1	CB-19	C	13
ST-76	3KΩ	*1.2KΩ	141Ω	58Ω	1.55 : 1	CB-19	C	13
ST-77	10KΩ	*3KΩ	420Ω	106Ω	1.85 : 1	CB-19	C	13
ST-78	10KΩ	*10KΩ	330Ω	420Ω	1 : 1	CB-19	C	13
ST-79	*600Ω	* 40Ω	36Ω	2.5Ω	3.68 : 1	CB-28	E	60

\*⊙ indicates new products DC resistance tolerance ±20%. \* indicates products with center tap for push-pull circuits.

● ST type output transformer

name	output (W)	impedance		DC resistance		Volume ratio	shape	lead By color	weight (gr)
		— Next	— Next	— Next	secondary				
ST-30	0.02	Δ12.5KΩ	50 KΩ	540Ω	1,250Ω	1 : 2	CBL-12	D	6.5
ST-31	0.2	*500Ω	3.2Ω	36.5Ω	0.24Ω	12.3 : 1	CB-19	B	13
ST-32	0.2	* 1,200Ω	8.0Ω	60Ω	0.62Ω	12.0 : 1	CB-19	B	13
ST-45	0.2	*600Ω	10.0Ω	34Ω	0.68Ω	7.75 : 1	CB-19	B	13
ST-41	0.7	* 200Ω	4Ω, 8Ω	11.2Ω	0.53Ω	4.87 : 1	CB-28	F	59
ST-42	0.7	* 300Ω	4Ω, 8Ω	17Ω	0.53Ω	5.97 : 1	CB-28	F	59
ST-46	0.7	* 400Ω	4Ω, 8Ω	25Ω	0.54Ω	6.87 : 1	CB-28	F	59
ST-47	0.7	* 500Ω	4Ω, 8Ω	28Ω	0.54Ω	7.69 : 1	CB-28	F	59
ST-48	0.7	* 600Ω	4Ω, 8Ω	34.5Ω	0.54Ω	8.41 : 1	CB-28	F	59
ST-60	3.0	* 60Ω	4Ω, 8Ω	3.5Ω	0.62Ω	2.58 : 1	CB-41	F	149
ST-62	3.0	* 120Ω	4Ω, 8Ω	6.5Ω	0.62Ω	3.66 : 1	CB-41	F	149
ST-81	0.2	* 1KΩ	8Ω	57Ω	0.67Ω	10.8 : 1	CB-19	B	14
ST-82	0.2	* 500Ω	8Ω	29Ω	0.67Ω	7.7 : 1	CB-19	B	14
ST-83	0.2	* 400Ω	8Ω	21Ω	0.67Ω	6.85 : 1	CB-19	B	14
ST-84	0.7	* 150Ω	4Ω, 8Ω	7.6Ω	0.54Ω	4.24 : 1	CB-28	F	60
ST-65A	8.0	* 40Ω	4, 8, 16Ω	1.7Ω	0.78Ω	1.52 : 1	CB-52	G	350
ST-67A	8.0	* 25Ω	4, 8, 16Ω	0.91Ω	0.80Ω	1.21 : 1	CB-52	G	350

\*⊙ indicates new products. DC resistance tolerance ±20%. \* indicates center tap for push-pull circuits. Δ indicates autotransformer (also serves as choke).

● Lead color chart

The diagram below shows the polarity arrangement as seen from the lead wire extracting side.

**A** 1st: 2nd  
Green (1) — 2: White  
3: White  
4: Green  
① ④ : 同極  
② ③ : 同極

**B** 1st: 2nd  
Red (1) — 2: White  
3: White  
4: Green  
① ④ : 同極  
② ③ : 同極

**C** 1st: 2nd  
Green (1) — 2: White  
3: White  
4: Black  
① ④ : 同極  
② ③ : 同極

**D** 1: Green  
2: Red  
① ④ : 同極  
Start of winding: ①. Center tap: ②.  
End of winding: ③.  
When using as a choke, use between ① and ③.

**A-603**  
3: 500Ω  
2: 150Ω  
1: 50KΩ  
① ④ : 同極  
② ③ : 同極  
① - 2 : 6 - 7 1 : 20  
① - 3 : 6 - 7 1 : 10

**E** 1st: 2nd  
Green (1) — 2: White  
3: White  
4: Green  
① ④ : 同極  
② ③ : 同極

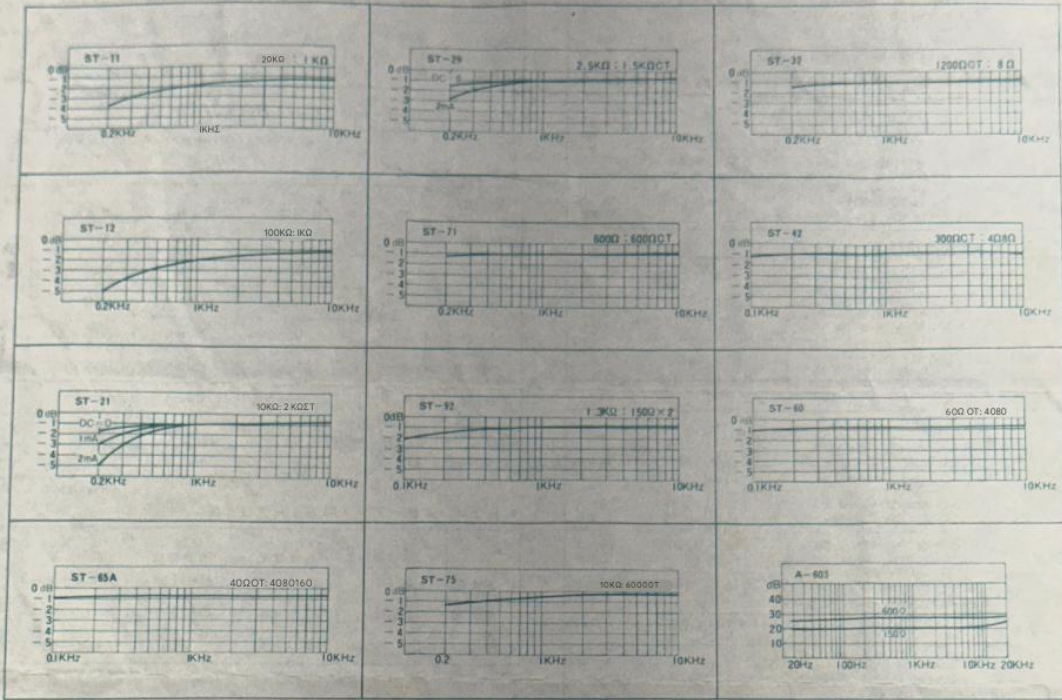
**F** 1st: 2nd  
Green (1) — 2: White (0)  
3: White (4Ω)  
4: Green (8Ω)  
① ④ : 同極  
② ③ : 同極

**G** 1st: 2nd  
Green (1) — 2: White (0)  
3: White (4Ω)  
4: Blue (8Ω)  
5: Green (16Ω)  
① ④ : 同極  
② ③ : 同極

**H** 1st: 2nd  
Green (1) — 2: White  
3: White  
4: Black  
5: Green  
① ④ : 同極  
② ③ : 同極

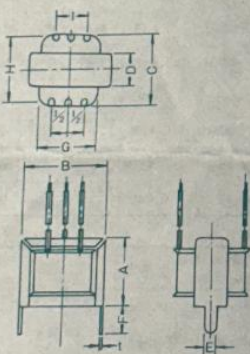
The lead wires are drawn in the following direction, so please be careful when designing the set.  
Please.  
Upper lead wire: CB-19- C B - 28  
Lower part: CB-35- C B - 52  
Side: CBL-12

[Characteristics table

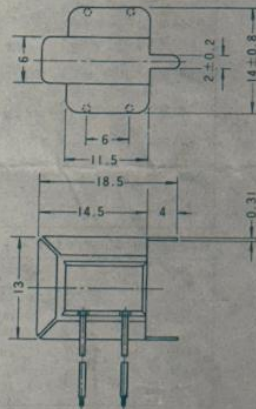


[Dimensions]

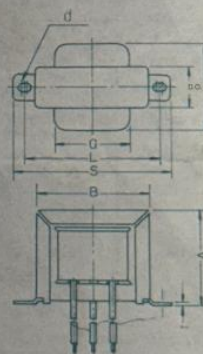
CB-19, CB-28



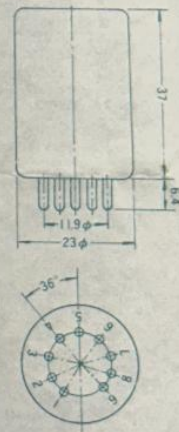
CBL-12



CB-35, CB-41, CB-52



A-6 type



Dimension table

shape	A	B	C	D	E	F	G	H	I	t
CB-19	15.5	20	15.5	6	2	4	14	14	8	0.3
CB-28	26.5	29.5	25	12.5	5	6.5	19.5	22.5	12	0.5

shape	A	B	C	D	L	S	d	t	G
CB-35	31	37	26	11.5	45	53	3.5×4.5	0.5	26
CB-41	36	43	34	15.5	52	60	3.5×5	0.6	34
CB-52	47	54	40	21	66	76	4.5×6.5	0.7	46

Unit: mm

● power transformer for stereo

Product name	case		for	shape
	Next	Next		
PV-145	100V 110V	10V-0-85V-105V-125V-0.7A 6.3V-2A (4 circuits) 32V-30mA	10W-15W x 2 stereo	PB-102 Rug Board
PV-180	100V 110V	10V-0-85V-105V-125V-0.7A (2 circuits) 6.3V-2A (2 circuits) 32V-30mA	15W-20Wx2 stereo	PB-114 Rug Board
PV-270	100V 110V	10V-0-150V-175V-0.73A (8PP-13A) 50W-2.6.3V-3A (2 circuits) 6.3V-2A (2 circuits) 40V-30mA	stereo amplifier	PB-114 Rug Board
OPV-300	100V	20V-0-320V-360V-400V-0.45A 6.3V-3.2A (2 circuits), 6.3V-3A (2 circuits) 32V-30mA	KT-88, 6CA7 6GB8 PP Stereo	PB-133 Rug Board
OPV-350	100V	20V-0-200V-240V-280V-0.5A 6.3V-6.4A 6.3V-4A 2.5V-5A (2 circuits), 70V-0.1A	2A3, 6GB8 6CA7 PP Stereo	PB-714 Rug Board
OPV-450	100V	30V-0-300V-360V-0.7A 3V-3.2A (2 circuits), 6.3V-2A (2 circuits), 70V-0.1A	KT-88, 6CA7 6GB8 PP Stereo	PB-133 Rug Board

● Preamp/Tuner Power Transformer

Product name	case		Application	shape
	Next	Next		
OPV-60A	100V, 110V	18V-0-160V-180V-200V-0.1A 6.3V-2.5A 6.3V-1A	For AM, FM tuner	PB-74 Lug Board
OPV-65A	100V 110V	4.3V-1A (2 circuits), 6.3V-1.2V-1A	For preamplifier	PB-78 Lug Board

● PT type power transformer

Product name	case		Application	shape
	Next	Next		
PT-65	100V	250V-65mA 5V-6.3V-0.7A * 6.3V-2.5A	6AR5, 6BM8 For 60W8 5S-6 ball	PB-73 Rug Board
OPT-80B	100V	15V-0-220V-250V-280V-0.12A 6.3V-3A 5V-6.3V-2A *	6AR5, 6BM8PP 60W8, 6B05S	PB-78 Lug Board
OPT-120B	100V	20V-0-220V-250V-280V-0.18A 6.3V-2A 6.3V(CT)-3A 5V-6.3V-2A *	6BM8, 6B05PP 6CA7, S	PB-35 Rug Board
OPT-150	100V	20V-0-220V-250V-300V-0.25A 6.3V-3A (2 circuits), 2.5V-5A 80V-0.1A	6B05, 7189PP	PB-102 Rug Board

● heater transformer

Product name	case		Purpose	shape
	primary	Next		
P-3F	100V	6.3V(CT)-0.3A	6AU6, 12AX7, 12AT7	CB-35 Rug Board
P-6F	100V	6.3V-1.5A 6.3V-1.5A	*For stereo preamplifier	CB-6025 Cover type

● Power transformer for transistor amplifier

Product name	case		for	shape
	Next	Next		
TP-8	100V	24V (12V, 6V tap)-0.32 A	preamplifier Amplifier for small output	CB-52 Rug Board
TP-90	100V 110V	38V (34V, 30V tap) x 2-0.8A 25V-0.1A 6.3V-0.5A	10-20W x 2 Stereo Integrated amplifier (Class B PP) lug board	PB-85 Rug Board
TP-160	100V 110V	50V (45V, 40V tap) x 2-1.0A 25V-0.1A 6.3V-0.5A	20-30W x 2 stereo Integrated amplifier (Class B) lug board	PB-95 Rug Board
RP-06	100V	24V (12V, 6V tap)-0.6A	Amplifier for small output	CB-6021 Rug Board
RP-10	100V	24V (12V, 6V tap)-1.0A	Amplifier for small output	CB-6425 Rug Board
RP-01	100V	40V (30V, 20V tap) x 2-0.13A 6.3V-0.3A	For preamplifier	DW5 With angle
RP-15	95V 100V 105V	30V (25V, 20V, 15V tap)-1.5A 6.3V-0.5A	5-10W x 2 Stereo main amplifier with angle	PB-74
RP-22	95V 100V	17.5V (15V, 12.5V tap) x 2-2.2A 6.3V-0.5A 25V x 2-0.1A	10-25W x 2 Integrated amplifier with angle	PB-85
RP-25	95V 100V	26V (23V, 20V tap) x 2-2.5A 6.3V-0.5A 25Vx2-0.1A	25-40W x 2 Integrated amplifier with angle	PB-95
RP-35	95V 100V 105V	35V (30V, 17.5V tap)-3.5A (2 circuits) 6.3V-0.5A	40-100W x 2 10-25W x 4	PB-114 With angle
RP-21	100V	12V (6V tap) - 0.15A	For DC power supply	CB-35 Rug
RP-45	100V	24V (12V tap) - 0.15A		CB-41 Rug
RP-81	100V	18V (9V tap) - 0.1A		CB-35 Rug
RP-82	100V	18V (9V tap) - 0.2 A		CB-41 Rug
RP-84	100V	18V (9V tap) - 0.4A +2V		CB-52 Rug
RP-92	100V	9V (4.5V tap) - 0.2 A		CB-35 Rug
RP-94	100V	9V (4.5V tap) - 0.4 A		CB-41 Rug

Note: TP-8 RP-06, RP-10 118V can also be used as bridge full-wave rectification and 12Vx2 or 6Vx2 full-wave rectification.

● Power transformer for transistors

Product name	case		Purpose	shape
	Next	Next		
P-08R	100V	5.3V-0.3A 6.3V-0.3A		CB-48 Rug Board
P-4H	100V	6.3V-0.6A 6.3V-0.6A	heater	CB-52 Rug Board
P-5H	100V	6.3V-1.0A 6.3V-1.0A	"Plot and Amplifier for small output	CB-6021 Rug Board
P-7H	100V	6.3V-2.0A 6.3V-2.0A		CB-6425 Rug Board

Note: Can also be used in parallel or series connection (12.6V)

● choke coil

Product name	case		shape	
	inductance	DC resistance		
C-5-200	5H ± 20% 10%	200mA 250mA	84Ω ± 20%	PH-4
C-5-300	5H *	300mA 380mA	55Ω ± *	F-1-85
C-10-100	10H *	100mA 130mA	220Ω *	PH-74
C-10-150	10H *	150mA 200mA	179Ω *	PH-85
C-10-250	10H *	250mA 290mA	109Ω *	PH-85
C-30-80	30H *	80mA 100mA	625Ω *	PH-74
C-30-30	30H *	30mA 40mA	1120Ω *	CB-6020
OC-3-500	3H *	500mA 650mA	32Ω *	PH-102

Note: DC resistance is measured at 20°C.

● Choke coils for transistor amplifiers

Product name	case		Purpose	shape
	inductance	DC resistance		
C-20M-03	20mH	0.3A	0.82 or less	CB-35 Rug Board
C-20M-10	20mH	1.0A	1.12 or less	Used with P-4H CB-48 Rug Board
C-02-2	16mH, 200mH	2A, 0.2A	1.4Ω	Used in conjunction with 150-40 and 160-40 CB-400 Rug Board

Note: DC resistance is measured at 20°C.

● SW type Hi-Fi output transformer

Product name	Output impedance (W) Primary secondary		Frequency characteristics (at low level)	conversion loss	Purpose	shape
	Primary	secondary				
SW-15-8	15	8kΩ 4, 8, 16Ω	10Hz ~ 40kHz	0.4dB	6B05 PP	WA-78
SW-15-4	15	4.5kΩ 4, 8, 16Ω	10Hz ~ 70kHz	0.4dB	6R8PP	WA-78
SW-30-8 30/8kg 8,160	30	8kΩ 4, 8, 16Ω	10Hz ~ 40kHz Cathode return possible	0.4dB	7189 PP	WA-85
SW-30-4	30	6kΩ 8,16Ω	20Hz ~ 40kHz	0.4dB	7591 PP	WA-85
SW-50-5	50	5kΩ 1.6Ω Cathode winding primary	10Hz ~ 50kHz	0.4dB	6L60C PP	WA-102
SW-50-3	30	3.5kΩ 4, 8, 16Ω	10Hz ~ 50kHz	0.4dB	6GB8 2A3 KT-88	WA-85
SW-50-3	50	3.5kΩ 4, 8, 16Ω	10Hz ~ 50kHz	0.4dB	6CA7 6L60C	WA-102
SW-100-4	100	4.5kΩ 4, 8, 16Ω	10Hz ~ 50kHz	0.4dB	KT-88 6CA7 6GB8	WA-133

● HS type Hi-Fi output transformer

Product name	Output impedance (W) Primary secondary		Frequency characteristics (at low level)	conversion loss	Purpose	shape
	Primary	secondary				
HS-7	5	7kΩ 4, 8, 16Ω	70Hz ~ 25kHz	0.55dB	6AR5, 6F5, 60W8 6B05 S	D.W.
HS-5	5	5kΩ 4, 8, 16Ω	70Hz ~ 30kHz	0.55dB	6B05, 6V6, 60W8 6BM8 S	D.W.
HS-3	5	3kΩ 4, 8, 16Ω	70Hz ~ 30kHz	0.6 dB	6L60C 6CA7 2A3 S	D.W.

● W-type Hi-Fi output transformer

Product name	Output impedance (W) Primary Secondary		Frequency characteristics (at low level)	conversion loss	Application Shape
	Primary	Secondary			
W-10-8	10	8kΩ 4, 8, 16Ω	14Hz ~ 120kHz	0.4dB	6A05, 60W8, 5B05 PP
W-10-6	10	6kΩ 4, 8, 16Ω	14Hz ~ 125kHz	0.4dB	6R-PI5, 60W8, 2A3 PP

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