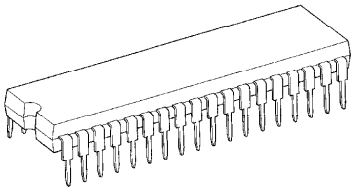
TENTATIVE TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MONOLITHIC

TA8750AN

SECAM CHROMA PROCESSOR

The TA8750AN is a SECAM chroma processor packaged in a 36 lead, shrink type, dual in line plastic package.
The TA8750AN includes all of the functions required to realize a PAL / SECAM CTV in conjunction with a PAL single chip IC TA8691N or a PAL / NTSC single chip IC TA8690AN.
The TA8750AN is also able to be used with the TA7698AP (PAL / NTSC V / C / D).



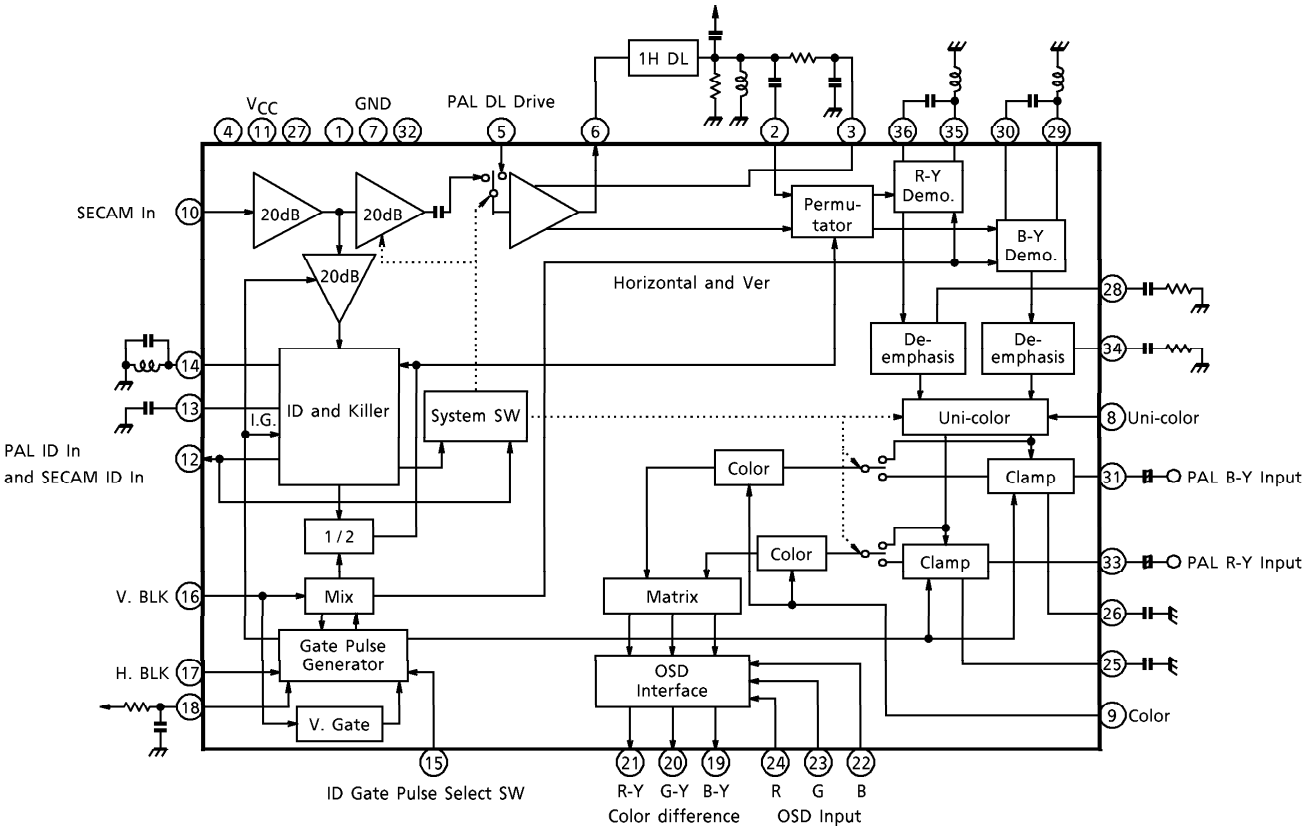
SDIP36-P-500-1.78

Weight : 2.98g (Typ.)

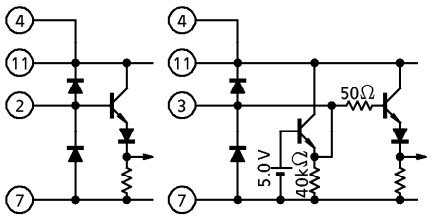
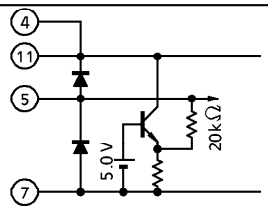
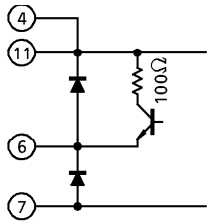
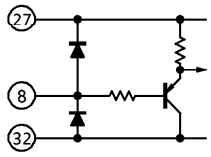
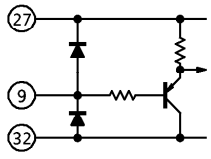
FEATURES

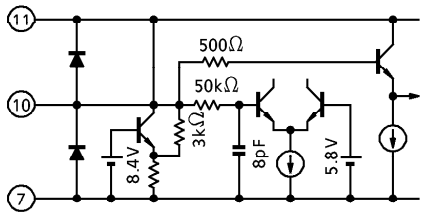
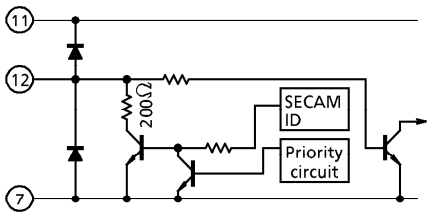
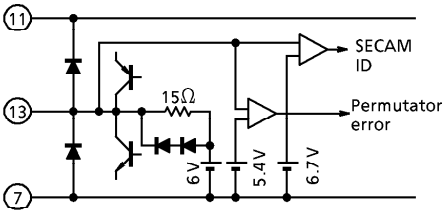
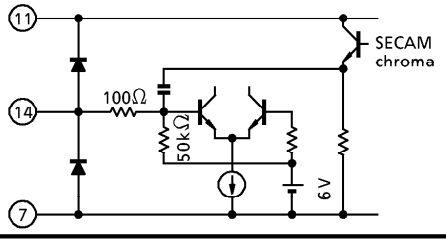
- SECAM limiter
- PAL / SECAM switch for 1H DL drive circuit
- SECAM demodulator
- De-emphasis
- Color control
- Uni-color control
- Clamp circuits for PAL color-difference signals
- PAL / SECAM SW
- G-Y matrix
- Gate pulse generator (H ID / V ID)
- OSD interface

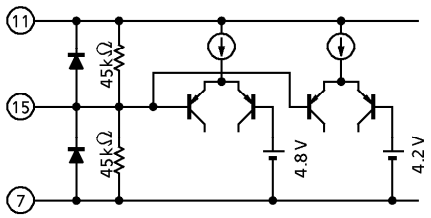
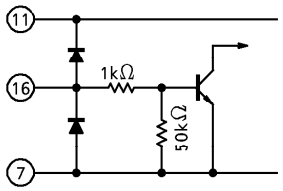
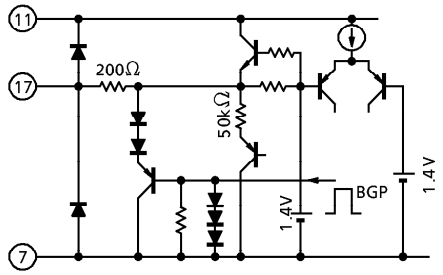
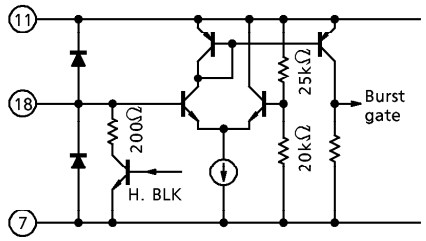
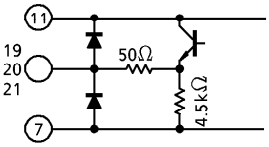
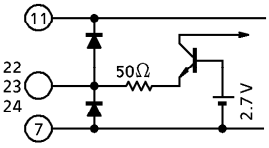
BLOCK DIAGRAM

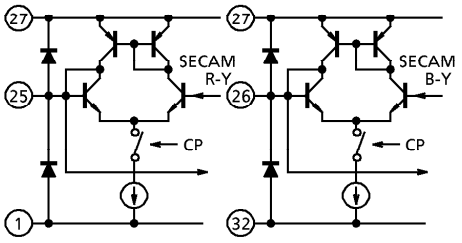
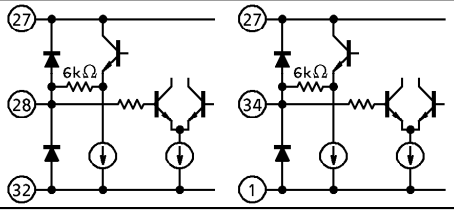
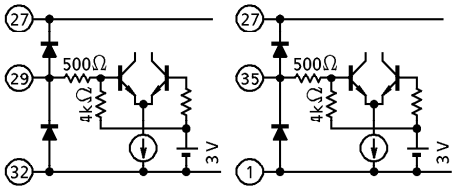
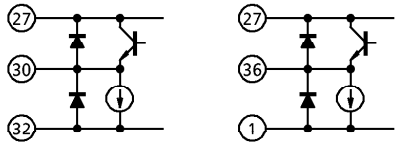
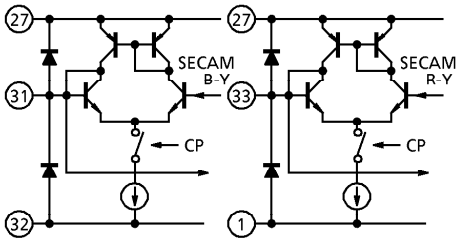


TERMINAL FUNCTION

PIN No.	PIN NAME	FUNCTION	INTERFACE CIRCUIT
1	GND1	This is the ground for R-Y demodulator, R-Y de-emphasis and R-Y clamp circuits.	—
2 3	DL Input Bias	The input terminal of 1H delayed chroma signal for the SECAM Permutator.	
4	V_{CC1}	This is the power supply for the DL circuit. Recommended supply voltage is 9V.	—
5	PAL DL Input	A PAL chroma signal is led from the TA8690AN, TA8691N. An internal system switch selects this PAL signal or SECAM signal according to the system ID signal, and delivers to a DL drive circuit.	
6	DL Drive	The PAL / SECAM chroma signal output (switched by internal system switch) for a 1H delay line. Connect a load resistor of 2kΩ to GND.	
7	GND2	This is the ground for DL input, permutator, system switch, gate pulse generator and chroma amplitude circuits.	—
8	Uni-color	Color saturation of SECAM signal increases when the terminal voltage of pin 7 increases.	
9	Color	Color saturation (both SECAM and PAL) increases when the terminal voltage of pin 6 increases.	

PIN No.	PIN NAME	FUNCTION	INTERFACE CIRCUIT
10	SECAM Input	SECAM chroma signal is led to this terminal through a bell filter circuit.	
11	V_{CC2}	This is the power supply for the DL, permutator, system switch, gate pulse generator and chroma amplitude circuits. Recommended supply voltage is 9V.	—
12	PAL ID In and SECAM ID In	An input terminal of a PAL ID signal. In case the DC voltage of more than 2V is applied to this terminal, the system switched to the PAL mode. When the SECAM ID circuit detects the SECAM signal, the terminal pin 10 goes to low. So, in case that this terminal is connected to the PAL color control terminal, then the system ID priority is set to SECAM.	
13	ID Filter	Hold capacitance for SECAM idification is connected.	
14	ID Coil	A 4.328MHz tuned tank circuit for SECAM idification is connected. Adjust tank coil so that the recovered DC voltage at the terminal 20 is maximum value for 4.328MHz.	

<table>
<tr><th>PIN No.</th><th>NAME</th><th>FUNCTION</th><th>INTERFACE CIRCUIT</th></tr>
<tr><td>15</td><td>Gate Switch</td><td>Swith of SECAM identification detection.
<table><tr><th>PIN VOLTAGE</th><th>DETECTED ID</th></tr><tr><td>4.0V –</td><td>Only V ID.</td></tr><tr><td>4.5V</td><td>Only H ID.</td></tr><tr><td>5.0V +</td><td>Both of V and H ID.</td></tr></table></td><td> 
</td></tr>
<tr><td>16</td><td>V. BLK Input</td><td>An input terminal of V. BLK pulse.</td><td> 
</td></tr>
<tr><td>17</td><td>H. BLK Input</td><td>An input terminal of flyback pulse for H. BLK, internal flip flop driving, and gate pulse generator.
During gate pulse period, the pin 22 voltage becomes 4.2V (Typ.)</td><td> 
</td></tr>
<tr><td>18</td><td>Gate Pulse Filter</td><td>Time constant for gate pulse generator is connected.</td><td> 
</td></tr>
<tr><td>19
20
21</td><td>B-Y Output
G-Y Output
R-Y Output</td><td>Color-difference signal output.</td><td> 
</td></tr>
<tr><td>22
23
24</td><td>OSD B Input
OSD G Input
OSD R Input</td><td>Input for OSD.
OSD turn ON by 300mA + current drawn out of these pins.</td><td> 
</td></tr>
</table>

PIN No.	NAME	FUNCTION	INTERFACE CIRCUIT
25 26	R-Y Clamp B-Y Clamp	Clamp capacitance for the color-difference signal path is connected.	
27	V_{CC3}	The pin for V_{CC}. Supply 9V.	—
28 34	De-emphasis (B-Y) De-emphasis (R-Y)	SECAM de-emphasis Connect a resistor and capacitor to GND for SECAM de-emphasis.	
29 35	B-Y Demo. R-Y Demo.	SECAM B-Y detector A 4.250MHz tuned tank circuit for SECAM B-Y demodulator is connected.	
30 36	B-Y Limiter Output R-Y Limiter Output	SECAM R-Y detector A 4.406MHz tuned tank circuit for SECAM R-Y demodulator is connected.	
32	GND3	The pin for GND.	—
31 33	PAL B-Y Input PAL R-Y Input	An input terminal of a PAL color-deference signal. An input clamp circuit coincides the input bias voltage with a corresponding SECAM bias voltage. An internal system SW selects a PAL color deference signal or a SECAM color deference signal according to the system ID signal.	

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Supply Voltage	V_{CC}	13	V
Power Dissipation	$P_D$max	1600 (Note)	mW
Input Signal Voltage	e_{in}	5	V_{p-p}
Operating Temperature	T_{opr}	−20~65	°C
Storage Temperature	T_{stg}	−55~150	°C

(Note) When using the device at above Ta = 25°C, decrease the power dissipation by 12.8mW for each increase of 1°C.

ELECTRICAL CHARACTERISTICS

DC VOLTAGE CHARACTERISTICS (Unless otherwise specified, V_{CC} = 9V, Ta = 25°C)

PIN No.	CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
1	GND1	GND1	—	—	—	—	V
2	DL Input	V_2	—	—	—	—	V
3	Bias	V_3	—	3.9	4.3	4.7	V
4	V_{CC1}	V_{CC1}	—	—	—	—	V
5	PAL DL Input	V_5	—	3.9	4.3	4.7	V
6	DL Drive	V_6	—	4.9	5.6	6.2	V
7	GND2	GND2	—	—	—	—	V
8	Uni-color	V_8	—	—	—	—	V
9	Color	V_9	—	—	—	—	V
10	SECAM Input	V_{10}	—	7.3	7.7	8.0	V
11	V_{CC2}	V_{CC2}	—	—	—	—	V
12	PAL ID and SECAM ID Output	V_{12}	—	—	—	—	V
13	ID Filter	V_{13}	—	5.6	6.0	6.4	V
14	ID Coil	V_{14}	—	3.5	3.9	4.3	V
15	Gate Switch	V_{15}	—	4.3	4.5	4.7	V
16	V. BLK Input	V_{16}	—	—	—	—	V
17	H. BLK Input	V_{17}	—	0.4	1.4	1.8	V

PIN No.	CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
18	Gate Pulse Filter	V_{18}	—	—	—	—	V
19	B-Y Output	V_{19}	—	5.0	5.5	6.0	V
20	G-Y Output	V_{20}	—	5.0	5.5	6.0	V
21	R-Y Output	V_{21}	—	5.0	5.5	6.0	V
22	OSD B Input	V_{22}	—	1.4	1.7	2.1	V
23	OSD G Input	V_{23}	—	1.4	1.7	2.1	V
24	OSD R Input	V_{24}	—	1.4	1.7	2.1	V
25	R-Y Clamp	V_{25}	—	—	—	—	V
26	B-Y Clamp	V_{26}	—	—	—	—	V
27	V_{CC3}	V_{CC3}	—	—	—	—	V
28	B-Y De-emphasis	V_{28}	—	3.6	4.5	5.3	V
29	B-Y Demo.	V_{29}	—	2.7	3.0	3.3	V
30	B-Y Limiter Output	V_{30}	—	6.1	6.8	7.5	V
31	PAL B-Y Input	V_{31}	—	—	—	—	V
32	GND3	GND3	—	—	—	—	V
33	PAL R-Y Input	V_{33}	—	—	—	—	V
34	R-Y De-emphasis	V_{34}	—	3.6	4.5	5.3	V
35	R-Y Demo.	V_{35}	—	2.7	3.0	3.3	V
36	R-Y Limiter Output	V_{36}	—	6.1	6.8	7.5	V

AC CHARACTERISTICS (Unless otherwise specified, V_{CC} = 9V, Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
SECAM Input Impedance	Z_{10}	—	(Note 1)	2.1	3.0	3.9	kΩ
SECAM Priority Switch Voltage	V_{SWSCM}	—	(Note 2)	5.0	5.8	—	V
SECAM Limiter Gain	G_{LIM}	—	(Note 3)	30	40	—	dB
SECAM ID Voltage	V_{IDSCM}	—		6.3	6.6	—	V
SECAM Acknowledge Voltage	V_{ACSCM}	—	(Note 4)	—	0.0	0.3	V
SECAM ID Sensitivity	S_{IDSCM}	—		0.5	1.0	2.0	mV_{p-p}
PAL ID Input Detection Voltage	V_{PAL}	—	(Note 5)	1.0	1.4	—	V
PAL Drive Input Impedance	Z_5	—	(Note 6)	28	40	52	kΩ
DL Amp. Gain	G_{DL}	—	(Note 7)	−1.0	2.0	4.0	dB
PAL Drive Input Dynamic Range	D_5			1.6	2.0	2.4	V_{p-p}
SECAM Detector Band Width	BW_{DEMO}	—	(Note 8)	±500	—	—	kHz
SECAM Detector AMR Characteristics	AMR	—	(Note 9)	30	40	—	dB
R-Y Output Amplitude	v_{28}	—	(Note 10)	0.6	1.0	1.5	V_{p-p}
B-Y Output Amplitude	v_{34}			0.45	0.71	1.05	
R-Y Relative Gain	R-Y / B-Y	—	(Note 11)	0.43	0.58	0.70	
G-Y Relative Gain	G-Y / B-Y			0.27	0.37	0.46	

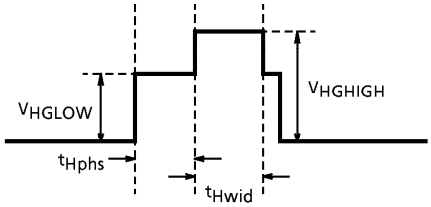
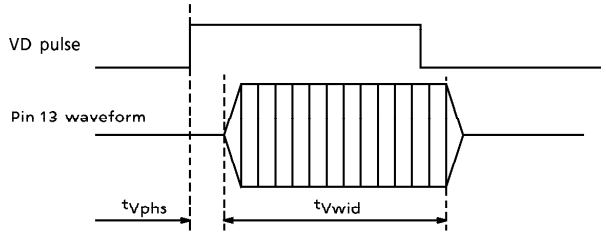
CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Residual Carrier Level	v_{LEAK}	—	(Note 12)	—	—	100	mV_{p-p}
Color Difference Dynamic Range	D_{31} D_{33}	—	(Note 13)	2.5	3.0	—	V_{p-p}
Uni-color Control Voltage	V_8	—	(Note 14)	4.0	4.5	5.0	V
Uni-color Control Voltage Range	ΔV_8			1	2	2	V
Uni-color Gain Control Range	ΔG_8			16	18	—	dB
Color Control Voltage	V_9	—	(Note 15)	4.0	4.5	5.0	V
Color Control Voltage Range	ΔV_9			1.5	2.0	2.5	V
Color Gain Control Range	ΔG_9			16	18	—	dB
Color Difference Output Blanking Voltage	V_{BLK}	—	(Note 16)	5.0	5.5	6.0	V
Color Difference Output Blanking Voltage Difference	ΔV_{BLK}			—	—	0.1	V
V. BLK Det Voltage	V_{thVBLK}	—	(Note 17)	2.0	2.2	2.5	V
H. BLK Det Voltage	V_{thVBLK}			1.1	1.4	1.7	V
H. Gate Pulse Phase	t_{Hphs}	—	(Note 18)	7.0	7.5	8.0	μs
H. Gate Pulse Width	t_{Hwid}			3.0	3.5	4.0	μs
H. Gate Pulse Output High Level	V_{HBHI}			3.9	4.2	4.8	V
H. Gate Pulse Output Low Level	V_{HBLO}			1.9	2.2	2.5	V
V. Gate Pulse Phase	t_{Vphs}	—	(Note 19)	7	8	9	H
V. Gate Pulse Width	t_{Vwid}			5	6	7	H
Gate Pulse Switching Level	V_{GSWH}	—	(Note 20)	—	4.8	5.1	V
	V_{GSWL}			3.9	4.2	—	V
OSD ON Current	I_{ON}	—	(Note 21)	0.2	0.3	0.4	mA
OSD OFF Current	I_{OFF}	—	(Note 22)	0.15	0.22	0.30	mA
OSD Output High Voltage	V_{OSDH}	—	(Note 23)	6.5	6.7	6.9	V
OSD Output Low Voltage	V_{OSDL}	—	(Note 24)	4.4	4.7	5.0	V
OSD Rise Time	t_R	—	(Note 25)	—	15	100	ns
OSD Dising Propagation Time	t_{RD}			—	40	100	ns
OSD Fall Time	t_R			—	25	100	ns
OSD Falling Propagation Time	t_{RD}			—	15	100	ns

MEASUREMENT CONDITION (Unless otherwise specified, V_{CC} = 9V, Ta = 25°C)

NOTE No.	ITEM	SYMBOL	MEASUREMENT METHOD
1	SECAM Input Impedance	Z_{10}	(1) SW10A : off, SW10B : off (2) Input 4.43 [MHz], 100 [mV_{p-p}] from TP10. (3) Measure 4.43MHz amplitude at pin 10. (v_{10} [mV_{p-p}]) (4) Z_{10} [kΩ] = 20ℓog $\frac{3 \times v_{10}}{100 - v_{10}}$
2	SECAM Priority Switch Voltage	V_{SWSCM}	(1) SW10A : on, V0 = 5 [V], SW10B : off (2) SW12 : a, V12 = 9 [V] (3) Input SECAM chroma signal (ID level 100 [mV_{p-p}]) from TP10. (4) Measure pin 12 voltage when pin 12 voltage becomes lower than 0.5 [V] by lowering V10 voltage.
3	SECAM Limiter Gain	G_{LIM}	(1) SW10A : on, SW10B : off, SW12 : b (2) Input 4.43 [MHz], 10 [mV_{p-p}] from TP10. (3) Measure 4.43MHz amplitude at pin 6. (v_6 [mV_{p-p}]) (4) G_{LIM} [dB] = 20ℓog $\frac{v_6}{10}$
4	SECAM ID Voltage SECAM Acknowledge Voltage SECAM ID Sensitivity	V_{IDSCM} V_{ACSCM} S_{IDSCM}	(1) SW10A : on, SW10B : on, V10 = 0 [V], SW12 : a, V = 5 [V] (2) Input SECAM chroma signal (ID level 100 [mV_{p-p}]) from TP10. (3) Adjust ID coil so that pin voltage of pin 13 can be maximum. Measure the pin voltage after adjustment. (V_{IDSCM}) (4) Measure pin voltage of pin 12. (V_{ACSCM}) (5) Measure amplitude of input signal at pin 10 when pin 12 voltage becomes 5 [V] by lowering amplitude of input signal. (S_{IDSCM})
5	PAL ID Detection Voltage	V_{PAL}	(1) SW12 : a, V12 = 0 [V], SW5A : on, SW5B : a (2) Input 4.43 [MHz], 100 [mV_{p-p}] from TP5. (3) Measure pin voltage of pin 12 when input signal outputted from pin 6 by increasing V12. (V_{PAL})
6	PAL Drive Input Impedance	Z_5	(1) SW5A : off, SW5B : a (2) Input 4.43 [MHz], 100 [mV_{p-p}] from TP5. (3) Measure 4.43MHz amplitude at pin 5. (v_5 [mV_{p-p}]) (4) Z_{10} [kΩ] = 20ℓog $\frac{47 \times v_5}{100 - v_5}$

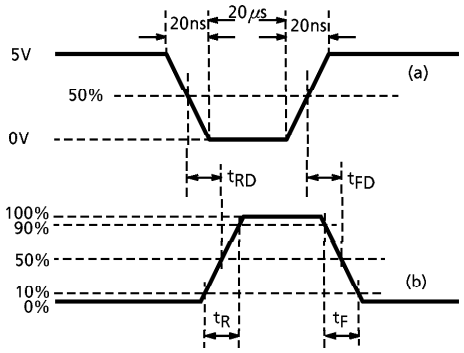
NOTE No.	ITEM	SYMBOL	MEASUREMENT METHOD
7	DL Amp. Gain, PAL Drive Input Dynamic Range	G_{DL} D_5	(1) SW5A : on, SW5B : a, SW12 : a, V12 = 5 [V] (2) Input 4.43 [MHz], 100 [mV_{p-p}] from TP5. (3) Measure 4.43MHz amplitude at pin 6. (v_6 [mV_{p-p}]). (4) G_{DL} [dB] = $20\ell og \frac{v_6}{10}$ (5) Measure amplitude of input signal when signal outputted from pin 6 starts to distort by increasing amplitude of input signal.
8	SECAM Detector Bandwidth	BW_{DEMO}	(1) SW10A : on, SW10B : off, SW12 : b, SW15 : B (2) Apply 9 [V] to pin 13. (3) Input fc = 4.25 [MHz], 100 [dBμV] which pin 10 is FM modulated by 1 [kHz]. (4) Measure amplitude of 1 [kHz] signal at pin 28. (v_{28}) (5) Measure fc frequency width v_{28}. (BW_{DEMO})
9	SECAM Detector AMR Characteristics	AMR	(1) SW10A : on, SW10B : off, SW12 : b, SW15 : B (2) Apply 9 [V] to pin 13. (3) Input fc = 4.25 [MHz], 100 [dBμV] which pin 10 is FM modulated by 1 [kHz]. (4) Measure amplitude of 1 [kHz] signal at pin 28. (v_{FM}) (5) Input fc = 4.25 [MHz], 100 [dBμV] which pin 10 is AM modulated (30 [%]) by 1 [kHz]. (6) Measure amplitude of 1 [kHz] signal at pin 28. (v_{AM}) (7) AMR [dB] = $20\ell og \frac{v_{FM}}{v_{AM}}$
10	R-Y Output Amplitude B-Y Output Amplitude	v_{28} v_{34}	(1) SW10A : on, SW10B : off, SW12 : b (2) Input SECAM 75% standard color bar chroma signal from TP10. (3) Measure output amplitude of pins 28 & 34. (v_{28}, v_{34})
11	R-Y Relative Gain B-Y Relative Gain	R-Y / B-Y G-Y / B-Y	(1) SW10A : on, SW10B : off, SW12 : b (2) Adjust VR8 & 9 so that pin 8 & 9 voltage can be 4.5 [V]. (3) Input SECAM rainbow color bar chroma signal from TP10. (4) Measure output amplitude of pins 19, 20 & 21. (v_{19}, v_{20}, v_{21}) (5) R-Y / B-Y = $\frac{v_{21}}{v_{19}}$ G-Y / B-Y = $\frac{v_{20}}{v_{19}}$

NOTE No.	ITEM	SYMBOL	MEASUREMENT METHOD
12	Residual Carrier Level	v_{LEAK}	(1) SW10A : on, SW10B : off, SW12 : b (2) Apply 9 [V] to pin 13. (3) Adjust VR8 & 9 so that pin 8 & 9 voltage can be 4.5 [V]. (4) Input 4.25 [MHz], 100 [dBμV] to pin 10. (5) Measure amplitude of 4.25 [MHz] component outputted to pin 19. (v_{LEAK})
13	Color Difference Dynamic Range	D_{31} D_{33}	(1) SW12 : a, V12 = 5 [V] (2) Input PAL demodulation color difference signal from TP31 (TP33). (3) Measure amplitude of input signal when signal outputted from pin 6 starts to distort by increasing amplitude of input signal. (D_{33})
14	Uni-color Control Voltage Uni-color Control Voltage Range Uni-color Gain Control Range	V_8 ΔV_8 ΔG_8	(1) SW10A : on, SW10B : off, SW12 : b (2) Input SECAM 75% standard color bar chroma signal from TP10. (3) Measure pin 19 output amplitude by varying pin 8 voltage from 0~9 [V]. (4) If the minimum value of pin 19 output amplitude is 0%, maximum value is 100% and pin 8 voltage is V8 at 50%, voltage difference of pin 8 voltage at 10% and 90%. (5) The ratio between maximum and minimum value of pin 19 output amplitude is ΔG_8.
15	Color Control Voltage Color Control Voltage Range Color Gain Control Range	V_9 ΔV_9 ΔG_9	(1) SW10A : on, SW10B : off, SW12 : b (2) Input SECAM 75% standard color bar chroma signal from TP10. (3) Measure pin 19 output amplitude by varying pin 9 voltage from 0~9 [V]. (4) If the minimum value of pin 19 output amplitude is 0%, maximum value is 100% and pin 9 voltage is V9 at 50%, voltage difference of pin 9 voltage at 10% and 90%. (5) The ratio between maximum and minimum value of pin 19 output amplitude is ΔG_9.

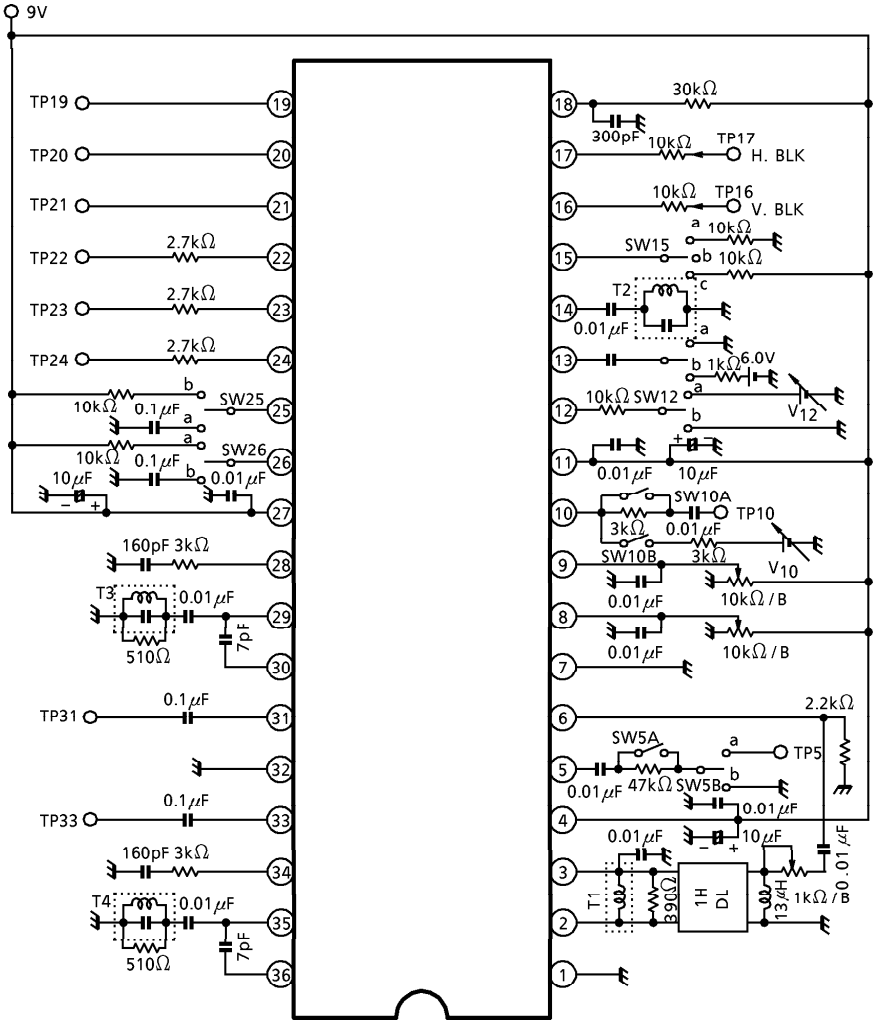
NOTE No.	ITEM	SYMBOL	MEASUREMENT METHOD
16	Color Difference Output BLK Voltage Color Difference Output BLK Voltage Difference	V_{BLK} ΔV_{BLK}	(1) SW10A : on, SW10B : off, SW12 : b (2) Adjust VR8 & 9 so that pin 8 & 9 voltage can be 4.5 [V]. (3) Input SECAM 75% standard color bar chroma signal from TP10. (4) Measure voltage of blanking period at TP19, 20 & 21. (V_{BLK}) (5) Measure voltage of each blanking period of TP19, 20 & 21. (ΔV_{BLK})
17	Vertical BLK Detection Voltage Horizontal BLK Detection Voltage	V_{thVBLK} V_{thHBLK}	(1) SW10A : on, SW10B : off, SW12 : b, SW16 : b, V12 = 0 [V], SW17 : c (2) Input SECAM 75% standard color bar chroma signal from TP10. (3) Raise peak value of vertical blanking pulse from 0V. (4) Measure peak value of vertical blanking pulse when vertical blanking starts working. (V_{thVBLK}). (5) Raise peak value of horizontal blanking pulse from 0V. (6) Measure peak value of horizontal blanking pulse which ramp waveform starts to be outputted from pin 18. (V_{thHBLK})
18	H Gate Pulse Phase H Gate Pulse Width H Gate Pulse Output High Level H Gate Pulse Output Low Level	t_{Hphs} t_{Hwid} V_{HBHI} V_{HBLO}	(1) Observe pin 17 waveform of horizontal blanking period. (2) Measure time of the part shown in the diagram. 
19	V Gate Pulse Phase V Gate Pulse Width	t_{Vphs} t_{Vwid}	(1) SW13 : b, SW15 : c (2) Measure pin 13 waveform of V blanking period. (3) Measure time of the part shown in the diagram. 

NOTE No.	ITEM	SYMBOL	MEASUREMENT METHOD
20	Gate Pulse Switch Voltage	V_{GL} V_{GH}	(1) SW13 : b (2) Connect DC voltage to pin 15. (3) Observe pin 13 waveform of horizontal blanking period by lowering voltage added to pin 15 from 4.5V. (4) Measure pin 15 voltage when detection current stop flowing into pin 13. (V_{GL}) (5) Observe pin 13 waveform of vertical blanking period by lowering voltage added to pin 15 from 4.5V. (6) Measure pin 15 voltage when detection current starts to flow into pin 13. (V_{GH})
21	OSD ON Current	I_{ON}	(1) SW10A : ON, SW10B : OFF, SW12 : b (2) Input SECAM white color only chroma signal from TP10B. (3) Connect DC current to TP22 and decrease from 2 [V]. (4) Measure flowing current from TP22 when TP19 voltage changes from 5.5 [V] to 6.7 [V] (I_{ON}).
22	OSD OFF Current	I_{OFF}	(1) SW10A : ON, SW10B : OFF, SW12 : b (2) Input SECAM white color only chroma signal from TP10B. (3) Connect DC current to TP22 and decrease from 0 [V]. (4) Measure flowing current from TP22 when TP19 voltage changes from 6.7 [V] to 5.5 [V] (I_{OFF}).
23	OSD Output High Voltage	V_{OSDH}	(1) SW10A : ON, SW10B : OFF, SW12 : b (2) Input SECAM white color only chroma signal from TP10B. (3) Ground TP22. (4) Measure TP19 voltage.
24	OSD Output Low Voltage	V_{OSDL}	(1) SW10A : ON, SW10B : OFF, SW12 : b (2) Input SECAM white color only chroma signal from TP10B. (3) Ground TP23. (4) Measure TP19 voltage.
25	OSD Rise Time OSD Rise Time Transfer Time OSD Fall Time OSD Fall Time Transfer Time	t_R t_{RD} t_F t_{FD}	(1) SW10A : ON, SW10B : OFF, SW12 : b (2) Input SECAM white color only chroma signal from TP10B. (3) Input waveform shown in another diagram to TP22 and measure each value.

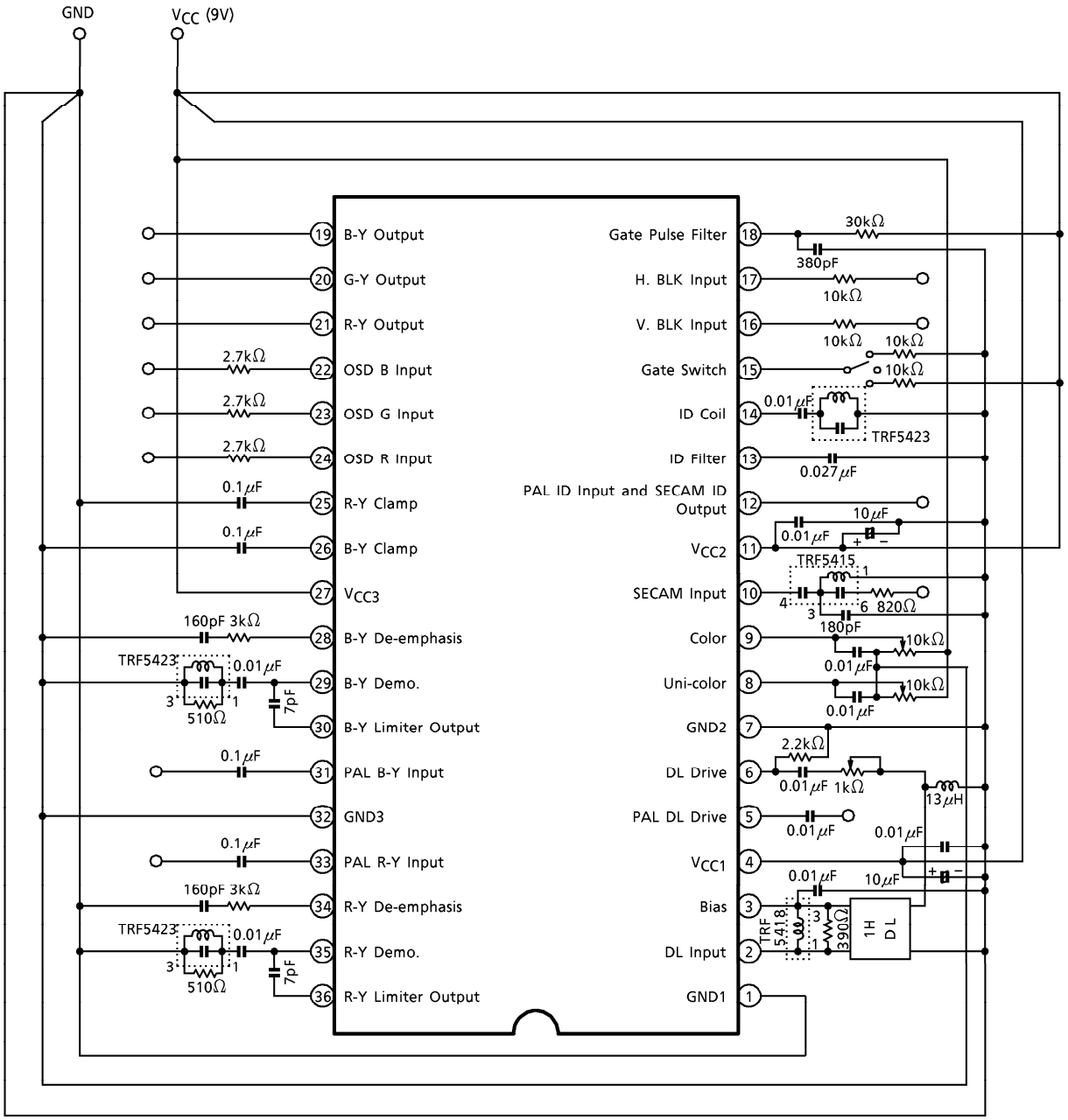
PULSE FOR MEASUREMENT OSD SECTION



TEST CIRCUIT



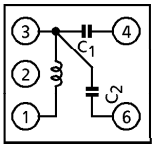
APPLICATION CIRCUIT



COIL DATA

- BELL filter

TRF5415

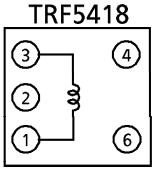


bottom view

C1 = 18pF
C2 = 39pF
L = 5.5~10μH, Q = 35

- Matching coil for 1H glass DL

TRF5418

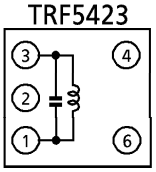


bottom view

L = 5.2~12.2μH, Q = 57

- SECAM ID, color difference demodulation coil

TRF5423



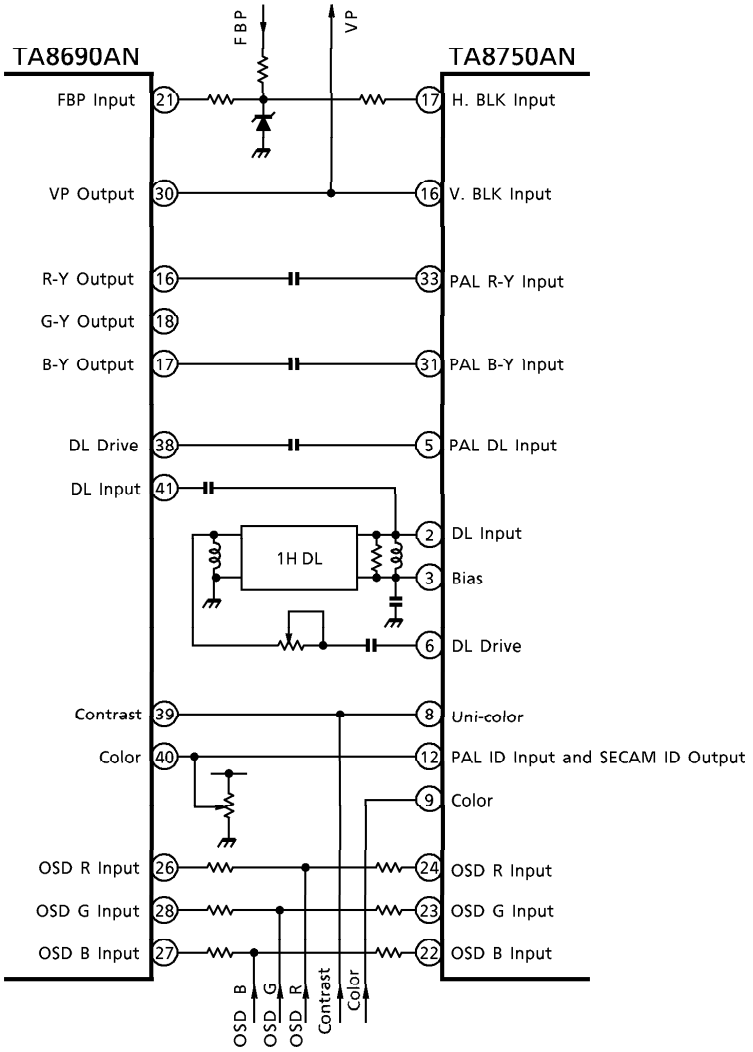
bottom view

C = 91pF
L = 5.0~12.2μH, Q = 75

1H glass DL data

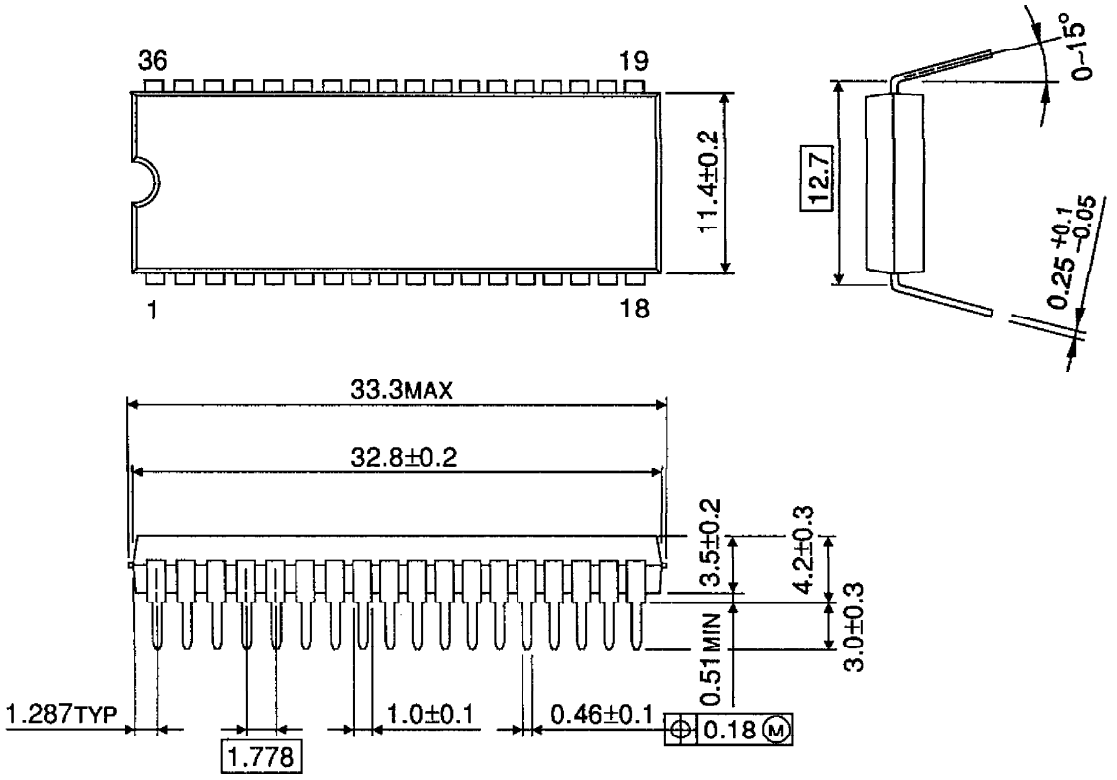
Center frequency	:	4.433619MHz
Passing loss	:	10 ± 3dB
3dB band width	:	± 1.0MHz

EXAMPLE FOR CONNECTION WITH TA8690AN



OUTLINE DRAWING

SDIP36-P-500-1.78 Unit : mm



Weight : 2.98g (Typ.)