

following is the translation of the spec.

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Product: RGB TO NTSC/PAL ENCODER FOR COLOR TV SIGNAL

Functions: Converting analog RGB signal to NTSC or PAL color TV signal

Features:

1. Converting analog RGB signal to NTSC or PAL color TV signal
2. Possible to select NTSC/PAL mode at the logic level by external pin
3. Y/C separation output pin
4. Flipflop to switch the phase per a line according to a synchronized signal at PAL mode
5. SOP24 Package

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Supply Voltage VCC

Power Dissipation Pd

Operation Temperature Topr

Storage Temperature Tstg

* Decreases by $5.5\text{ mW}/^\circ\text{C}$ at higher than 25°C

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Electrical Characteristics (Unless otherwise specified)

$T_a = 25^\circ\text{C}$, $V_{CC} = 5\text{V}$, $X_{TAL} = 3.58\text{MHz}$, $NT/PAL = H$, $SW = H$, $SW5 = I$

| | |
|--|-----------|
| CIRCUIT current | I_{CC} |
| AR Input Level | V_{IR} |
| AG Input Level | V_{IG} |
| AB Input Level | V_{IB} |
| (R-Y)O Output Level | V_{R-Y} |
| (B-Y)O Output Level | V_{B-Y} |
| Y _O Output Level | V_{Y0} |
| C _O Output Level | V_{C0} |
| V _O Output Level | V_{V0} |
| SYNC Level | V_S |
| Burst Level | V_B |
| SYNC/Y _O Level Ratio | R_{SY} |
| (R-Y)O Direct Current Output Voltage | V_{R-Y} |
| (B-Y)O | V_{B-Y} |
| Y _O | V_{Y0} |
| C _O | V_{C0} |
| V _O | V_{V0} |
| (R-Y) Modulation Gain | G_{R-Y} |
| (B-Y) Modulation Gain | G_{B-Y} |
| (R-Y) - (B-Y) Modulation Gain Difference | G_{R-B} |

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(R-Y)-(B-Y) Orthogonal Phase Shift ΔR
(R-Y)-BURST \downarrow ΔB
Carrier Leak Lsc

* This item is guaranteed by design.
Measured after SW5 is switched to Z

* Measured in 3.5 μ S after BURST
Value at Ta of 0 to 50°C

L Level Input Voltage V_{IL}
H Level Input Voltage V_{IH}
Input Impedance Z_I

* Not designed to resist a radiant ray.

Recommended Operation Voltage Range
Supply Voltage VCC

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1. Colon Difference Signal Output : output of ER-EY Signal
2. GND : Connected to GND
3. PCP Input : Pedestal Clamp Pulse Input (Minus Logic)

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4. Switch : Fixed to "H"
5. VCC : Connected to power supply
6. Color Signal Output : Y/C Separation color signal output
7. Composite Output : Composite signal output of NTSC or PAL
8. SYNC Input : Horizontal Synchronized signal input
9. Luminance signal input : Input luminance signal composed from RGB signal
10. Color difference signal Input : Input EB-EY signal
11. Color difference signal input : Input ER-EY signal
12. Burst Level Adjustment : connected to semi-fixed resistor for color burst signal amplitude adjustment
13. VCX0 input :
14. VCX0 input :
15. VCX0 output :
16. BFP input : Input burst flag pulse (minus logic)
17. APC Adjustment : Connected to semi-fixed resistor for adjusting color burst signal phase
18. Phase detector output : connected to PLL filter
19. NTSC/PAL Selection Input :
20. R Signal Input : Input analog R signal
21. G Signal Input : Input analog G signal

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- 22. B Signal Input: Input analog B signal
- 23. Luminance signal output: Output of luminance signal composed from RGB signal
- 24. Color difference signal output: Output of EB-EY signal

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Input/output Interface (Typical values for all the resistance value)

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Test Condition Chart (unless otherwise specified, 54=1)

Operation Voltage Range : V_{CC}

Circuit Current : I_{CC}

(R-Y)O Output Level : V_{R-Y}

(B-Y)O Output Level : V_{B-Y}

Y_O Output Level : V_{Y0}

SYNC Output Level : V_S

CO Output Level : V_{CO}

VO Output Level : V_{VO}

BURST Level : V_B

(R-Y)O Direct Current Output Voltage : V_{R-Y}

(B-Y)O Direct Current Output Voltage : V_{B-Y}

Y_O Direct Current Output Voltage : V_{Y0}

CO Direct Current Output Voltage : V_{CO}

VO Direct Current Output Voltage : V_{VO}

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Measure the voltage at both sides of 1KΩ resistor connected between (R-Y)0 and (B-Y)0 pins

Measure the voltage between test pin and GND

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Test Condition Chart (2) (unless otherwise specified, S4=D)

(R-Y) Modulation Gain : G_{R-Y}

(B-Y) Modulation Gain : G_{B-Y}

(R-Y)-(B-Y) Modulation Gain Difference : G_{R-B}

(R-Y)-(B-Y) Orthogonal phase shift : ΔR

(R-Y)-BURST Orthogonal Phase Shift : ΔB

Carrier Leak : LSC

L Level Input Voltage : V_{IL}

H Level Input Voltage : V_{IH}

Input Impedance : Z_I

Regards,