

# AN5371NS, AN5379NS

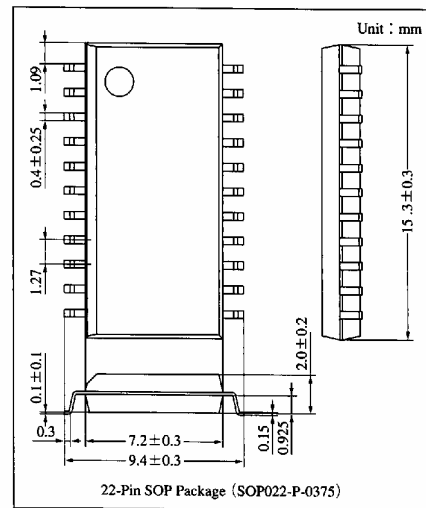
## RGB Signal Output IC for LCD TV

### Overview

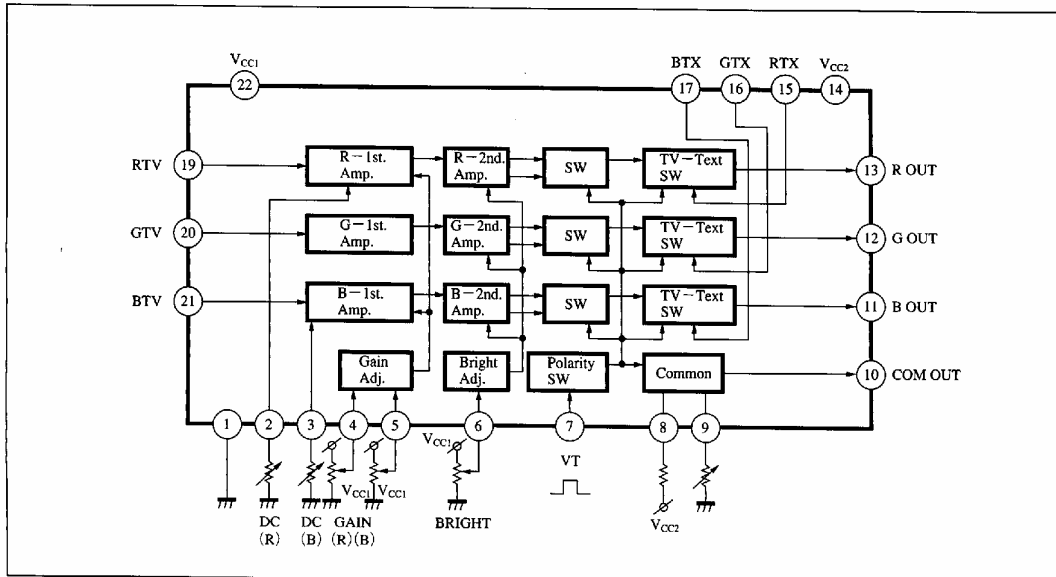
The AN5371NS and the AN5379NS are RGB signal output ICs for LCD TV. They can also output texts to be displayed. They can be directly connected to a signal processor IC of AN5372S. The AN5371NS is normal black, and the AN5379NS is normal white. Select one of them according to the LCD-type of a TV.

### Features

- Low operating voltage :  $V_{CC1}=5V$ , and  $V_{CC2}=10V$  typ.
- Including a brightness control circuit
- Gain and DC adjustment available for R and B signals (G signal is the reference)
- Responding to text input (RGB)
- Common-voltage output



### Block Diagram



### ■ Pin Descriptions

Pin No.	Pin name	Pin No.	Pin name
1	GND	12	G output
2	R adjustment	13	R output
3	B adjustment	14	Power supply ( $V_{CC2}=10V$ )
4	R voltage gain adj.	15	R <sub>TX</sub> input
5	B voltage gain adj.	16	G <sub>TX</sub> input
6	Brightness adjustment	17	B <sub>TX</sub> input
7	Polarity switching	18	NC
8	Common voltage high level input	19	R input
9	Common voltage low level input	20	G input
10	Common voltage output	21	B input
11	B output	22	Power supply ( $V_{CC1}=5V$ )

### ■ Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Supply voltage	$V_{CC}$	$V_{22}=5.5$	V
		$V_{14}=11.0$	
Supply current	$I_{CC}$	$I_{22}=5$	mA
		$I_{14}=20$	
Power dissipation	$P_D$	247.5 *	mW
Operating ambient temperature <sup>Note)</sup>	$T_{opr}$	-20 to +70	°C
Storage temperature <sup>Note)</sup>	$T_{stg}$	-55 to +125	°C

Note)  $T_a=25^{\circ}C$  except operating ambient temperature and storage temperature.

\* For AN5371NS, the value at  $P_D=5000mW$

### ■ Recommended Operating Range ( $T_a=25^{\circ}C$ )

Parameter	Symbol	Range
Operating supply voltage range	$V_{CC}$	$V_{22}$ 4.55V to 5.45V
		$V_{14}$ 9.1V to 10.9V *

\* For AN5371NS, the value at  $V_{14}=9.5$  to 10.9V