

## R/G/B VIDEO AMPLIFIER WITH OSD INTERFACE FOR MONITORS

KA2140B

### R/G/B VIDEO AMPLIFIER

The KA2140B is a very high frequency video amplifier system with an OSD interface, intended to be used in monitor with high resolution up to  $1280 \times 1024$ . It contains 3 matched R/G/B video Amplifiers with Blank signal and provides a flexible interfacing to DC controlled adjustment system.

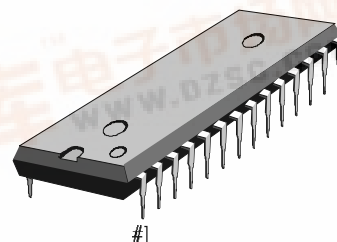
### FUNCTIONS

- R/G/B Video Amplifier
- OSD Interface
- Contrast/OSD Contrast/SUB Contrast Control
- Brightness Control
- Blank/Clamp Gate
- Video Clamp

### FEATURES

- 3 - Channel R/G/B Video Amplifier, 130MHz Bandwidth
- TTL OSD Input, 50MHz Bandwidth
- DC Contrast Control range: -38dB
- DC SUB Contrast Control range: -11dB
- Capable of 7.5V<sub>PP</sub> Output Swing Range
- Video/OSD high speed Switch

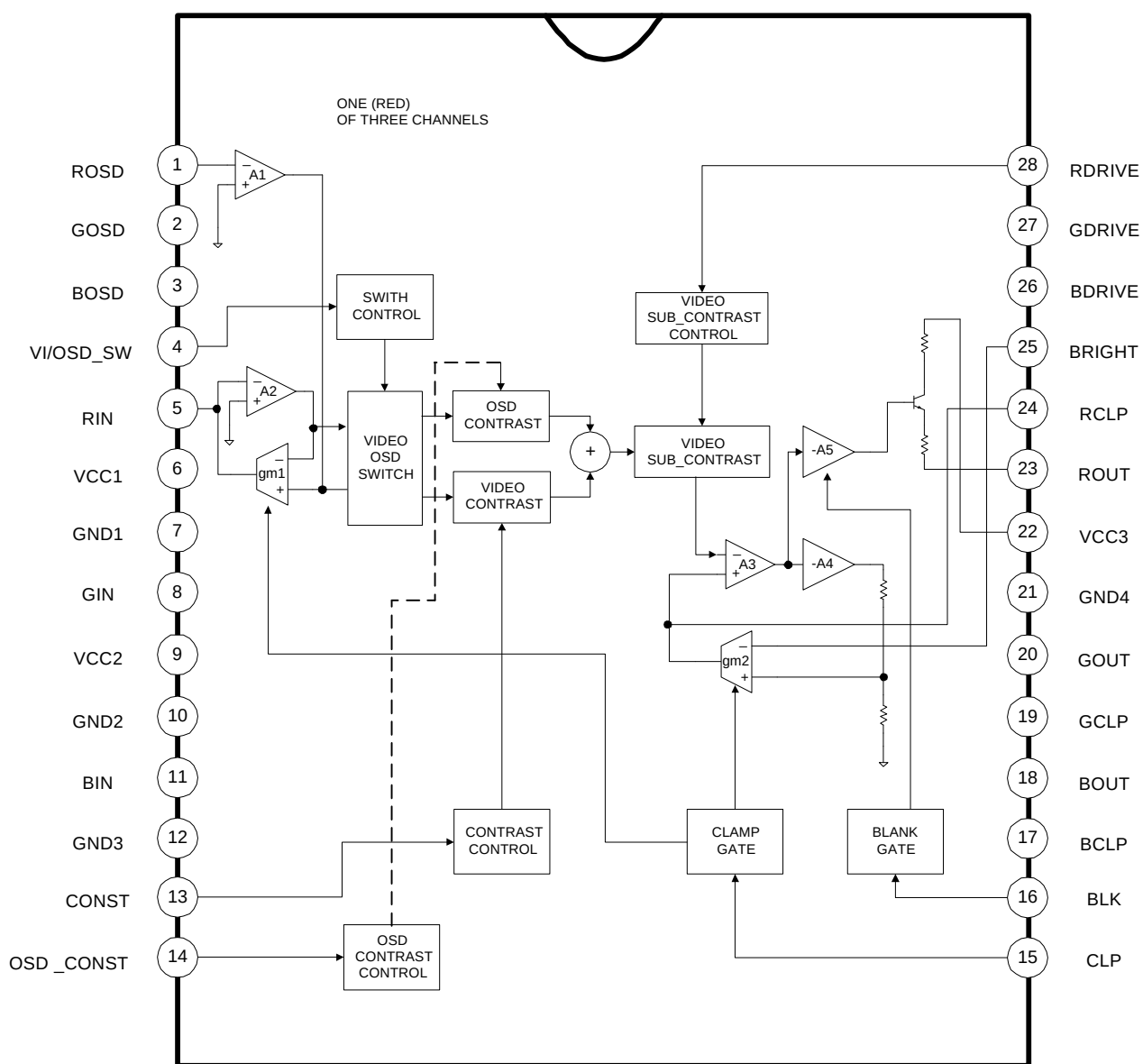
28-DIP-600A



### ORDERING INFORMATION

| Device  | Package | Operating Temperature |
|---------|---------|-----------------------|
| KA2140B | 28-DIP  | -25 °C ~ +80 °C       |

## BLOCK DIAGRAM



## PIN CONFIGURATIONS

Table 1. Pin Configurations

| Pin No | Symbol           | I/O | Configurations                |
|--------|------------------|-----|-------------------------------|
| 1      | ROSD             | I   | Red OSD Input                 |
| 2      | GOSD             | I   | Green OSD Input               |
| 3      | BOSD             | I   | Blue OSD Input                |
| 4      | VI/OSD_SW        | I   | Video or OSD Switch           |
| 5      | RIN              | I   | Red Video Input               |
| 6      | V <sub>CC1</sub> | -   | V <sub>CC</sub> (Normal)      |
| 7      | GND1             | -   | Ground 1                      |
| 8      | GIN              | I   | Green Video Input             |
| 9      | V <sub>CC2</sub> | -   | V <sub>CC</sub> (Normal)      |
| 10     | GND2             | -   | Ground 2                      |
| 11     | BIN              | I   | Blue Video Input              |
| 12     | GND3             | -   | Ground 3                      |
| 13     | CONST            | I   | Contrast Control              |
| 14     | OSD_CONST        | I   | OSD Contrast Control          |
| 15     | GCLP             | I   | Clamp Gate Signal Input       |
| 16     | BLK              | I   | Blank Gate Signal Input       |
| 17     | BCLP             | -   | Blue Clamp Cap                |
| 18     | BOUT             | O   | Blue Clamp Video Output       |
| 19     | GCLP             | -   | Green Clamp Cap               |
| 20     | GOUT             | O   | Green Video Output            |
| 21     | GND4             | -   | Ground 4                      |
| 22     | V <sub>CC3</sub> | -   | V <sub>CC</sub> (Output Part) |
| 23     | ROUT             | O   | Red Video Output              |
| 24     | RCLP             | -   | Red Clamp Cap                 |
| 25     | BRIGHT           | I   | Brightness Control            |
| 26     | BDRIVE           | I   | Blue Gain Control             |
| 27     | GDRIVE           | I   | Green Gain Control            |
| 28     | RDRIVE           | I   | Red Gain Control              |