

No.2874A

**LA7213** 

**VCR-Use** 

**Automatic Channel Selection Peripheral** 

### **Overview**

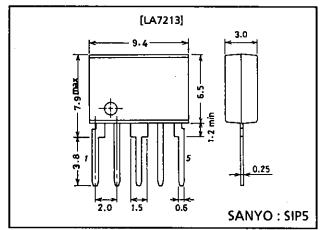
The LA7213 is a VCR-use automatic channel selection peripheral IC that contains a sync separator and a vertical sync separator.

#### **Functions and Features**

- · Sync separation
- · Vertical sync separation
- · Recommended supply voltage: 5V
- · Open collector output ( $R_L = 10k\Omega$ ),negative polarity output.

# **Package Dimensions**

unit: mm 3042C-SIP5



# **Specifications**

# Maximum Ratings at Ta = 25°C

| Parameter                   | Symbol              | Conditions | Ratings     | Unit |
|-----------------------------|---------------------|------------|-------------|------|
| Maximum supply voltage      | V <sub>CC</sub> max |            | 7.0         | V    |
| Allowable power dissipation | Pdmax               | Ta≦75℃     | 100         | mW   |
| Operating temperature       | Topr                |            | -15 to +75  | ℃    |
| Storage temperature         | Tstg                |            | -40 to +125 | °€   |

## Operating Conditions at Ta = 25°C

| Parameter                  | Symbol             | Conditions | Ratings | Unit |
|----------------------------|--------------------|------------|---------|------|
| Recommended supply voltage | V <sub>cc</sub>    |            | 5.0     | ٧    |
| Operating voltage range    | V <sub>CC</sub> op |            | 4 to 6  | V    |

#### Operating Characteristics at $Ta = 25^{\circ}C$ , $V_{CC} = 5V$

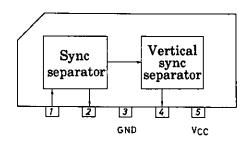
| Parameter                                  | Symbol             | Conditions                             | min | typ | max | Unit |
|--|--------------------|--|-----|-----|-----|------|
| Circuit Current                            | l <sub>cc</sub>    | No load                                | 0.5 | 0.9 | 1.5 | mA   |
| Sync separation operating current          | I <sub>SYNC</sub>  | SW1=b                                  |     | 85  |     | μА   |
| Sync separation minimum input level        | V <sub>I</sub> min | Color bar signal 1Vp-p=0dB, SW1=a      |     | -12 |     | dB   |
| Vertical sync separation output time delay | TV <sub>OUT</sub>  | Color bar of input = 1Vp-p,<br>SW1 = a | 5   | 10  | 20  | μs   |

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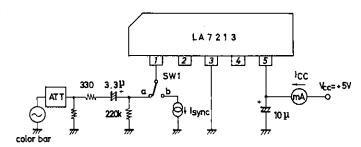
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| Parameter       | Symbol          | Conditions | min | typ | max | Unit |
|-----------------|-----------------|------------|-----|-----|-----|------|
| Output DC level | V <sub>2H</sub> | No load    | 4.9 |     |     | ٧    |
| Output DC level | V <sub>2L</sub> | No load    |     |     | 0.2 | ٧    |
| Output DC level | V <sub>4H</sub> | No load    | 4.9 |     |     | ٧    |
| Output DC level | V <sub>4L</sub> | No load    |     |     | 0.2 | ٧    |

# **Block Diagram**

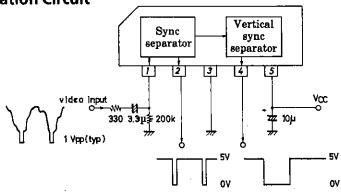


#### **Test Circuit**



Unit (resistance :  $\Omega$ , capacitance : F)





Unit (resistance :  $\Omega$ , capacitance : F)

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