



# 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.

### Specifications

Maximum Ratings at  $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	$V_{CC\text{ max}}$		7.0	V
Allowable power dissipation	$P_d\text{ max}$	$T_a \leq 75^\circ\text{C}$	100	mW
Operating temperature	$T_{opr}$		-15 to +75	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-40 to +125	$^\circ\text{C}$

Operating Conditions at  $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Recommended supply voltage	$V_{CC}$		5.0	V
Operating voltage	$V_{CC\text{ op}}$		4 to 6	V

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Circuit current	$I_{CC}$	No load	0.5	0.9	1.5	mA
Sync separation operating current	$I_{SYNC}$	SW1=b		85		$\mu\text{A}$
Sync separation minimum input level	$V_1\text{ min}$	Color bar signal 1Vp-p=0dB, SW1=a		-12		dB
Vertical sync separation output time delay	$T_{VOUT}$	Color bar of input=1Vp-p, SW1=a	5	10	20	$\mu\text{s}$
Output DC level	$V_{2H}$	No load	4.9			V
Output DC level	$V_{2L}$	No load			0.2	V
Output DC level	$V_{4H}$	No load	4.9			V
Output DC level	$V_{4L}$	No load			0.2	V

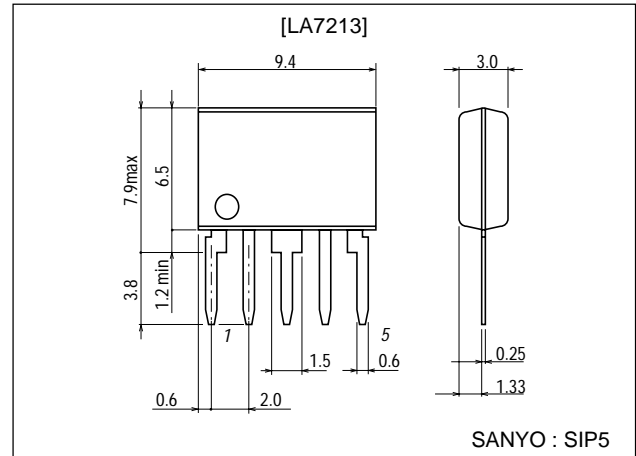
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### Package Dimensions

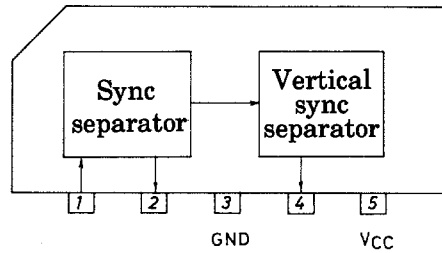
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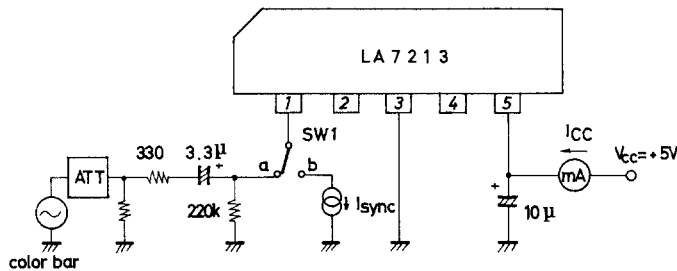


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## Block Diagram

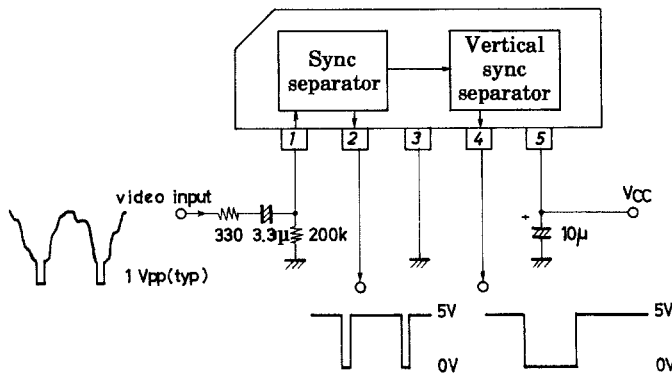


## Test Circuit



Unit (resistance : Ω, capacitance : F)

## Sample Application Circuit



Unit (resistance : Ω, capacitance : F)

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