



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		μA
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	μs
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

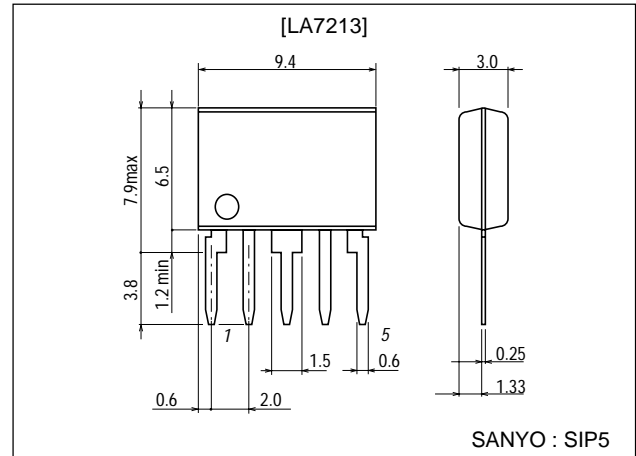
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Package Dimensions

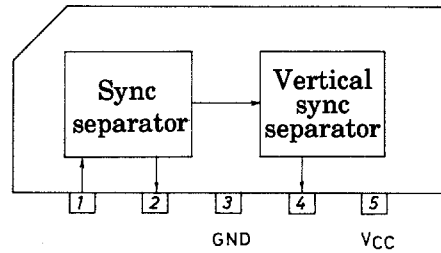
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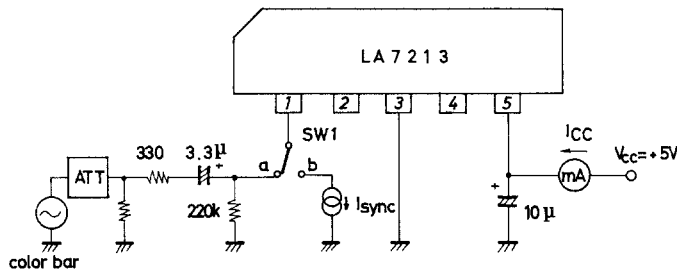


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Block Diagram

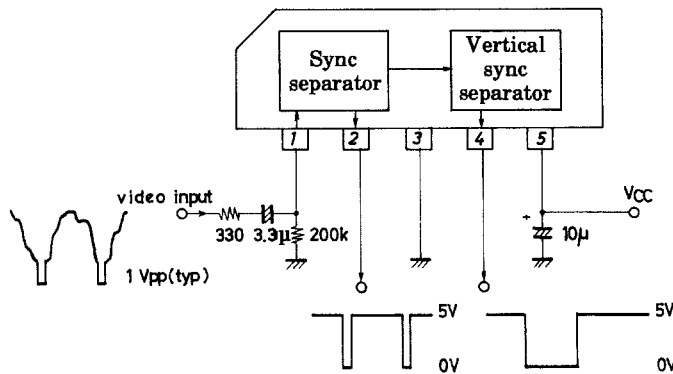


Test Circuit



Unit (resistance : Ω, capacitance : F)

Sample Application Circuit



Unit (resistance : Ω, capacitance : F)

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