



SANYO Semiconductors

DATA SHEET

LA7213

Monolithic Linear IC

For VCR-Use

**Automatic Channel Selection
Peripheral IC**

Overview

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

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} max		7.0	V
Allowable power dissipation	P_d max	$T_a \leq 75^\circ\text{C}$	100	mW
Operating temperature	T_{opr}		-15 to +75	°C
Storage temperature	T_{stg}		-40 to +125	°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	$V_{CC\ op}$		4 to 6	V

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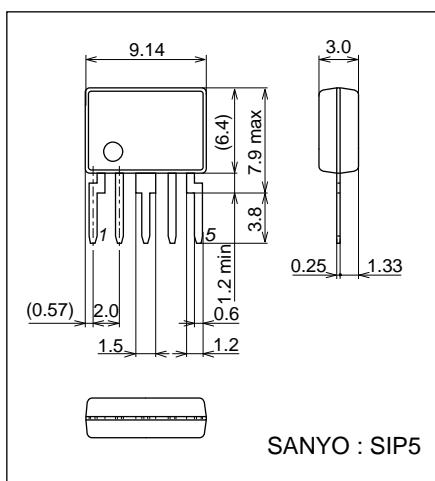
Electrical Characteristics at $T_a = 25^\circ\text{C}$, $V_{CC} = 5\text{V}$

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_I min	Color bar signal $1\text{Vp-p} = 0\text{dB}$, $SW1 = a$		-12		dB
Vertical sync separation output time delay	TV_{OUT}	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

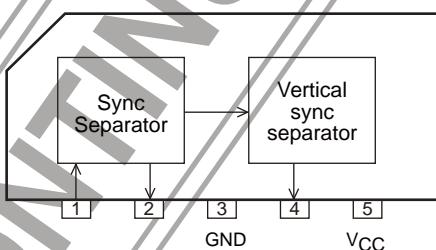
Package Dimensions

unit : mm (typ)

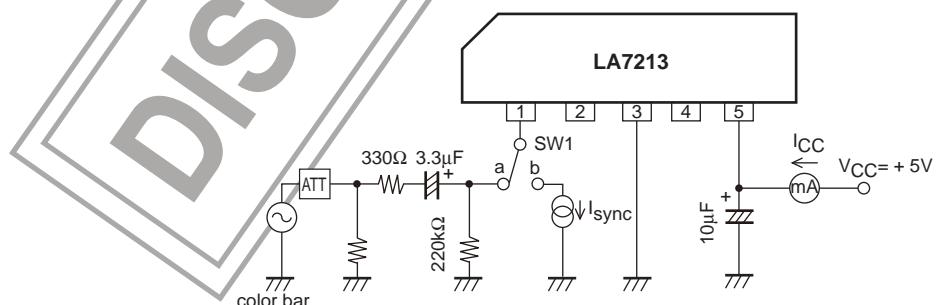
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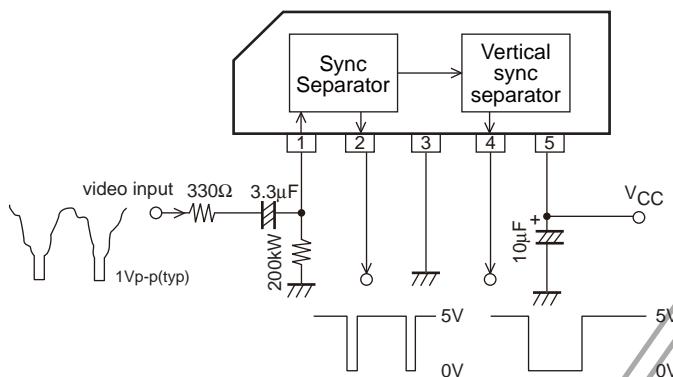
Block Diagram



Test Circuit



Application Circuit Example



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