

SANYO

No.2403

LA7300M

Monolithic Linear IC

VHS VTR PLAYBACK HEAD AMP, RECORDING AMP

Functions

- . 3-channel playback head amp
- . Single-channel recording amp
- . PB: One head select switch, two mode select switches
- . REC: Two head select switches

Features

- . No more than one IC required for 3-head/2-head use
- . On-chip driver transistor permitting direct recording
- . On-chip head select switches (3 types) facilitating the pattern design of a set

Maximum Ratings at Ta=25°C

			unit
Maximum Supply Voltage	V _{CC} max	(PB) 7.0	V
		(REC) 13.5	V
Allowable Power Dissipation	P _d max	480	mW
Operating Temperature	T _{opg}	-10 to +65	°C
Storage Temperature	T _{stg}	-40 to +125	°C

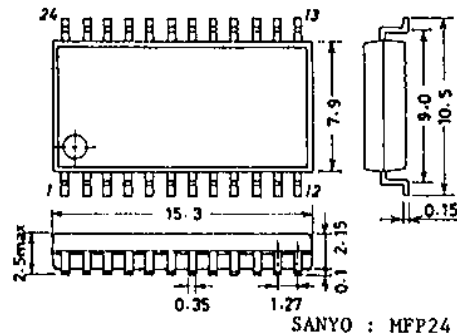
Operating Conditions at Ta=25°C

			unit
Supply Voltage	V _{CC}	(PB) 5.0	V
		(REC) 12.0	V
Operating Voltage Range	V _{CC} opg	(PB) 4.75 to 5.6	V
		(REC) 8.5 to 13.0	V

Case Outline 3045B-M24IC
(unit:mm)

The application circuit diagrams and circuit constants herein are included as an example and provide no guarantee for designing equipment to be mass-produced.

The information herein is believed to be accurate and reliable. However, no responsibility is assumed by SANYO for its use, nor for any infringements of patents or other rights of third parties which may result from its use.



These specifications are subject to change without notice.

SANYO ELECTRIC CO., LTD. SEMICONDUCTOR DIVISION
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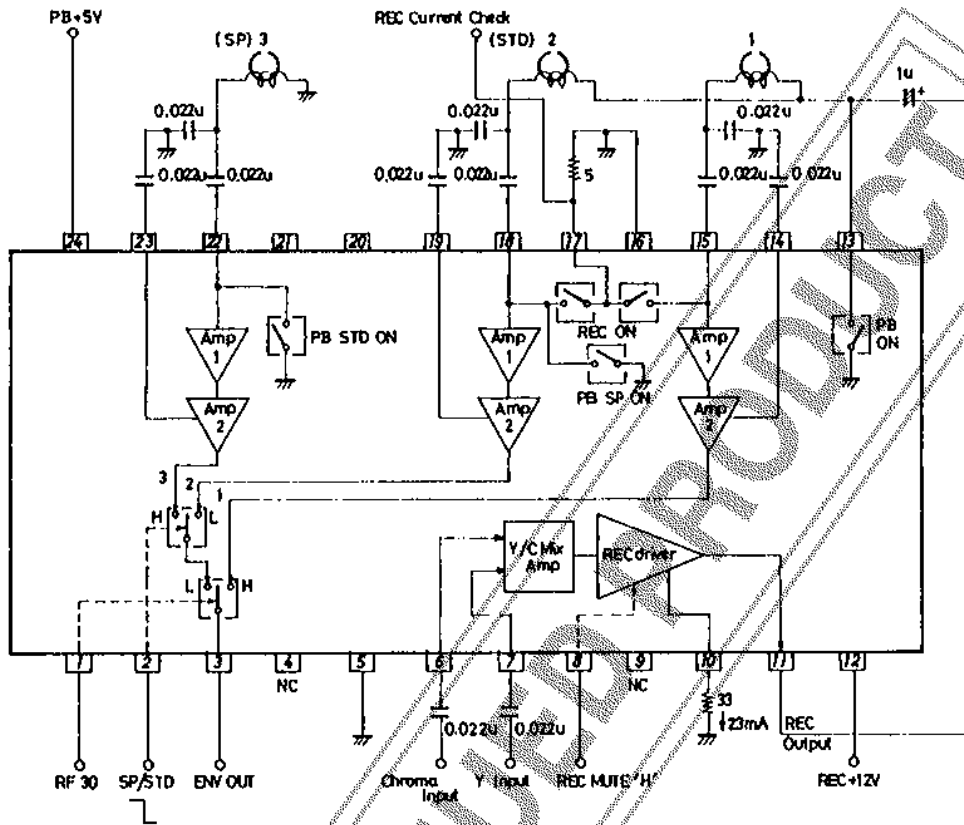
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Electrical Characteristics at Ta=25°C

Characteristic	Symbol	Test Conditions			Limits			unit			
		Input	Output		SW1	SW2	SW3		min	typ	max
(PB mode)				PB+5V	RF	SP/	REC				
Current Dissipation	I_{CCP}	T24		Pin24 flow-in current	1	1	MUTE	12.0	16.0	20.0	mA
Voltage Gain	CH1 2 3	$G_{VP}(1)$ (2) (3)	T15 T18 T22	T3 T3 T3	1 2 2	1 2 1		56.5	59.5	62.5	dB
Voltage Gain Difference 1	STD	$\Delta G_{VP}(1)$		$G_{VP}(1) - G_{VP}(2)$				-1.0	0	-1.0	dB
Voltage Gain Difference 2	SP	$\Delta G_{VP}(2)$		$G_{VP}(1) - G_{VP}(3)$				-1.0	0	-1.0	dB
Equivalent Input Noise Voltage	CH1 2 3	$V_{NIN}(1)$ (2) (3)		T3 T3 T3	1 2 2	1 2 1			1.1	1.5	μV_{RMS}
Frequency Characteristic	CH1 2 3	$\Delta V_{FP}(1)$ (2) (3)	T15 T18 T22	T3 T3 T3	1 2 2	1 2 1		-2.5	0		dB
Second Harmonic Distortion	CH1 2 3	$V_{HDP}(1)$ (2) (3)	T15 T18 T22	T3 T3 T3	1 2 2	1 2 1			-40	-35	dB
Maximum Output Level	CH1 2 3	$V_{OMP}(1)$ (2) (3)	T15 T18 T22	T3 T3 T3	1 2 2	1 2 1		0.8	1.0		Vpp
Crosstalk 1 STD	CH1 2	$V_{CR1}(1)$ (2)	T18 T15	T3 T3	1 2	2 2			-40	-35	dB
Crosstalk 2 SP	CH1 3	$V_{CR2}(1)$ (3)	T22 T15	T3 T3	1 2	1 1			-40	-35	dB
Output DC Offset 1		ΔV_{ODC1}	-	Pin3	1+2	2		-100	0	100	mV
Output DC Offset 2		ΔV_{ODC2}	-	Pin3	1+2	1		100	0	100	mV
(REC mode)				REC+12V	RF	SP/	REC				
Current Dissipation	I_{CCR}	T12		Pin12 flow-in current			2	25.0	37.0	49.0	mA
Voltage Gain	C Y	$G_{VR}(C)$ (Y)	T6 T7	T11 T11			2 2	16.0	19.0	22.0	dB
Voltage Gain Difference		ΔG_{VR}		-				-1.0	0	1.0	dB
Frequency Characteristic	C Y	$\Delta V_{FR}(C)$ (Y)	T6 T7	T11 T11			2 2	-1.0	0		dB
Second Harmonic Distortion	C Y	$V_{HDR}(C)$ (Y)	T6 T7	T11 T11			2 2		-50	-40	dB
Maximum Output Level	C Y	$V_{OMH}(C)$ (Y)	T6 T7	T11 T11			2 2	3.5	4.0		Vpp
Mute Attenuation	C Y	$V_{MR}(C)$ (Y)	T6 T7	T11 T11			1 1		-60	-50	dB
Cross Modulation Relative Level		V_{CY}	T6 T7	T11			2	-50		-40	dB

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Block Diagram



Test Circuit

