Double cassete tape recorder dual preamplifier BA3416BL

The BA3416BL is dual preamplifier (for playback only) that has been designed for use with dual-cassette decks. An internal switch is used to switch the left and right channel inputs between the A and B tape mechanisms. The playback heads can be directly coupled to the preamplifiers without coupling capacitors, and an internal switch is provided to switch the equalizer characteristics for metal and chrome tape.

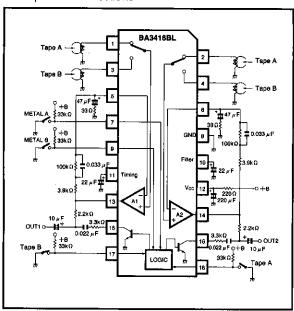
Applications

Dual-deck stereo radio cassette players

Features

- Internal tape A/tape B switch for use with dual-cassette decks.
- 2) Internal switch is provided to switch the equalizer characteristics for metal tape playback.
- Input bias circuit does not require coupling capacitors.
- Wide operating supply voltage range (Vcc = 3.5V to 12V).

Block diagram and external component connections



eamplifiers

●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Ųnit
Supply voltage	Vcc	14	V
Power dissipation	Pd	400*	mW
Operating temperature	Topr	-25~75	°C
Storage temperature	Tstg	−55~125	ొ

^{*} Reduced by 4.0mW for each increase in Ta of 1°C over 25°C.

●Recommended operating conditions (Ta = 25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit
Supply voltage	Vcc	3.5	8	12	V

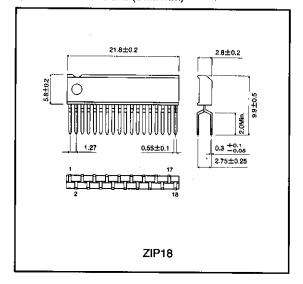
●Electrical characteristics (unless otherwise specified Ta = 25°C, Vcc = 8V, f = 1kHz, OUTPUT = pins 13 and 14)

Parameter	Symbol	Min.	Тур.	Мах.	Unit	Conditions
Quiescent current	lo	1.0	2.5	4.0	mA	V _{IN} =0V _{rme}
Open-circuit voltage gain	Gvo	70	84		dB	$R_L=10k\Omega$ $V_O=0dBV$
Maximum output voltage	V _{ом}	1.0	1.8		V _{rms}	THD=1%, R _L =10kΩ
Input conversion-noise voltage	V _{NIN}	_	1.1	2.0	μV _{rms}	R_g =2.2k Ω 、NAB45dB BPF (20Hz \sim 20kHz)
Input resistance	Rin	·	130		kΩ	-
Channel separation	cs	55	65		dB	Vo=1V _{rms}
ChA/ChB crosstalk	CTAB	60	70		dB	Vo=1V _{rms} .
Total harmonic distortion	THD	_	0.08	0.2	%	Vo=0.5V _{rms}

Tape selection

17pin	18pin	Operating
L	L	ТареВ
L	Н	ТареА
Н	L	ТареВ
Н	Н	Unstable (first pin to go "H" has priority)

●External dimensions (Unit: mm)



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