

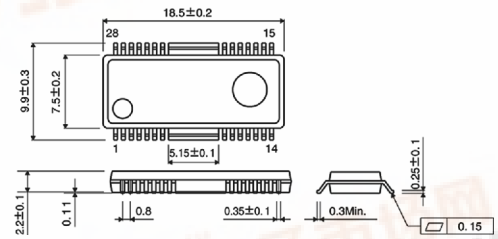


## 5 channel BTL Driver for CD **BA5814FM**

●Description

The BA5814FM is 5ch BTL driver for CD applications. Separating Vcc into PREVCC and POWTr (Power divides into CH1/2 and CH4/5) can make for better power efficiency.

●Dimension (Units : mm)



HSOP-M28

●Features

- 1) Small surface mounting power package HSOP-M28
- 2) Internal thermal shut down circuit
- 3) Wide dynamic range
- 4) Built-in variable 2 channel regulator (External PNPT<sub>r</sub> is necessary.)

●Applications

CD

●Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power supply voltage	V <sub>CC</sub>	13.5	V
Power dissipation	P <sub>d</sub>	2.2	W
Operating temperature range	Topr	-40 ~ +85	°C
Storage temperature range	Tstg	-55 ~ +150	°C

Derating : 17.6mW/°C for operation above Ta=25°C.

On less than 3%(percentage occupied by copper foil), 170mm 70mm, t=1.6mm

●Recommended Operating Conditions (Ta=25°C)

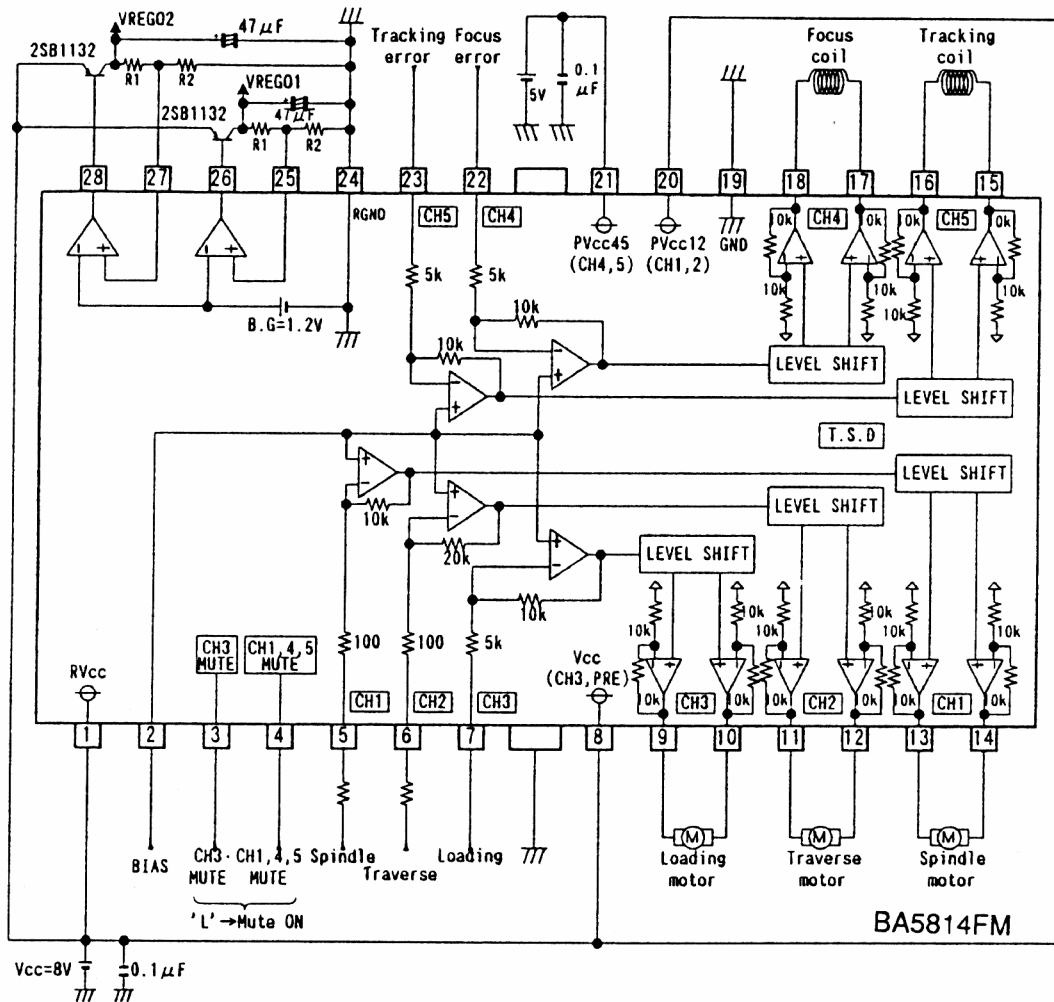
Parameter	Symbol	Min.	Typ.	Max.	Unit
Operating supply voltage	V <sub>CC</sub>	4.3	—	13.2	V

●Electrical Characteristics (Unless otherwise noted, Ta=25°C, Vcc= 8V, PVCC45=5V, BIAS=2.5V, RL=8 )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Quiescent current	ICC	—	20	30	mA	No load
<b>&lt;BTL Driver&gt;</b>						
Output offset voltage	VCC	-50	0	50	mV	
High level output voltage 1	VOM 1	5.4	6.0	—	V	CH1, 2, 3
High level output voltage 2	VOM 2	3.6	4.0	—	V	CH4, 5
Closed loop voltage gain 1	GVC1	9.5	12.0	14.5	dB	CH1 RIN=10k
Closed loop voltage gain 2	GVC2	15.5	18.0	20.5	dB	CH2 RIN=10k
Closed loop voltage gain 3	GVC3	16.5	18.0	19.5	dB	CH3, 4, 5
<b>&lt;Regulator&gt;</b>						
Threshold voltage of RE_I pin	VREITH	1.14	1.2	1.26	V	
Output sink current of RE_O pin	ISIN	10	50	—	mA	
Input bias current of RE_I pin	IBOP	—	20	300	nA	

※ This product is not designed for protection against radioactive rays.

●Application circuit



## Appendix

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