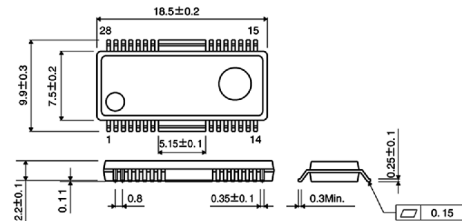


5 channel BTL Driver for CD **BA5814FM**

●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_r is necessary.)

●Applications

CD

●Absolute Maximum Ratings(Ta=25°C)

| Parameter | Symbol | Limits | Unit |
|-----------------------------|------------------|------------|------|
| Power supply voltage | V _{CC} | 13.5 | V |
| Power dissipation | Pd | 2.2 * | W |
| Operating temperature range | T _{opr} | -40 ~ +85 | °C |
| Storage temperature range | T _{stg} | -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)

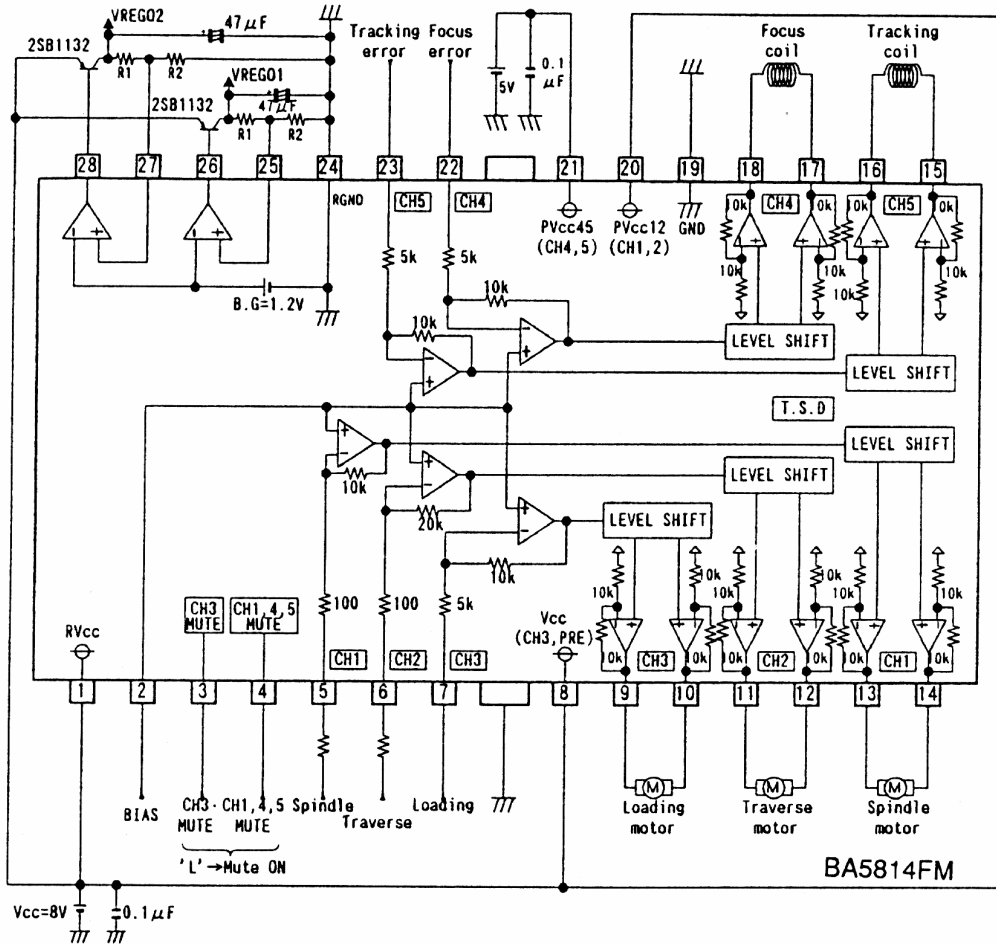
| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|--------------------------|-----------------|------|------|------|------|
| Operating supply voltage | V _{CC} | 4.3 | — | 13.2 | V |

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

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|---------------------------------|--------|------|------|------|------|--------------|
| Quiescent current | ICC | — | 20 | 30 | mA | No load |
| <BTL Driver> | | | | | | |
| 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=10kΩ |
| Closed loop voltage gain 2 | GVC2 | 15.5 | 18.0 | 20.5 | dB | CH2 RIN=10kΩ |
| Closed loop voltage gain 3 | GVC3 | 16.5 | 18.0 | 19.5 | dB | CH3, 4, 5 |
| <Regulator> | | | | | | |
| 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



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