

A

B

C

D

Notes (Unless Otherwise Indicated):

- 14 Input Balance Adjustment. Adjust to minimize input offset or overall THD as required by application.
- 13 Adjust for desired output stage bias current, or desired total module current. Typical adjustment values:
- | VARIANT: | Ic Q25/Q26 | Iq (Total) |
|----------|------------|------------|
| -0 | 6.2 mA | 25.0 mA |
| -1 | 27.8 mA | 47.5 mA |
- 12 Value sets range of output stage bias adjust. See Parts List.
- 11 Selected value.
Selection criteria: 5 mA idle current through R13
Nominal value 162 ohms. Expected range 20 ohms to 4320 ohms.
- 10 Selected value.
Selection criteria: 10 mA idle current through R15
Nominal value 162 ohms. Expected range 20 ohms to 4320 ohms.
Select after selecting R7
- 9 Cut trace or remove jumper if indicated component is installed.
- 8 For alternative compensation method install R14 in this location rather than location shown.
- 7 Locate TP2 adjacent to R14 so that R14 may be installed either as shown, or in the alternate position between TP2 and C3.
- 6 For alternative compensation method install R10 in this location rather than location shown.
- 5 Locate TP1 adjacent to R10 so that R10 may be installed either as shown, or in the alternate position between TP1 and C2.
- 4 Last Reference Designator used:
C5, D2, FB2, P7, Q26, R29
Reference Designator not used: None
- 3 Fixed resistors thin film or metal film, 100 mW min, 1% or better tol, except as noted.
Polarized capacitors aluminum electrolytic, rating as shown, tol +/-20% unless otherwise noted.
Non-polarized capacitors see parts list for construction & rating
- 2 Component values shown for reference only. Refer to parts list associated with specific variant and revision level.
- 1 VARIANTS:
SWOPA2620-0 SOT23 Output Devices
SWOPA2620-1 SOT223 Output Devices (High Bias)

Revision Notes

B. Not released. Incorporate comments. Relocate input balance adjustment pot. Add output protection diodes. Reassign Reference Designators. Minor value changes. Revise P/L.

A. Preliminary development version of this dwg # and title. Not released. Circulated for comments. Circuit based on Post #2409 and #2593 in "Discrete Opamp Open Design" thread on "diyaudio.com". Available online at < <http://www.diyaudio.com/forums/analog-line-level/218373-discrete-pamp-open-design-241.html#post3294663> > and < <http://www.diyaudio.com/forums/analog-line-level/218373-discrete-pamp-open-design-260.html#post3324000> >.

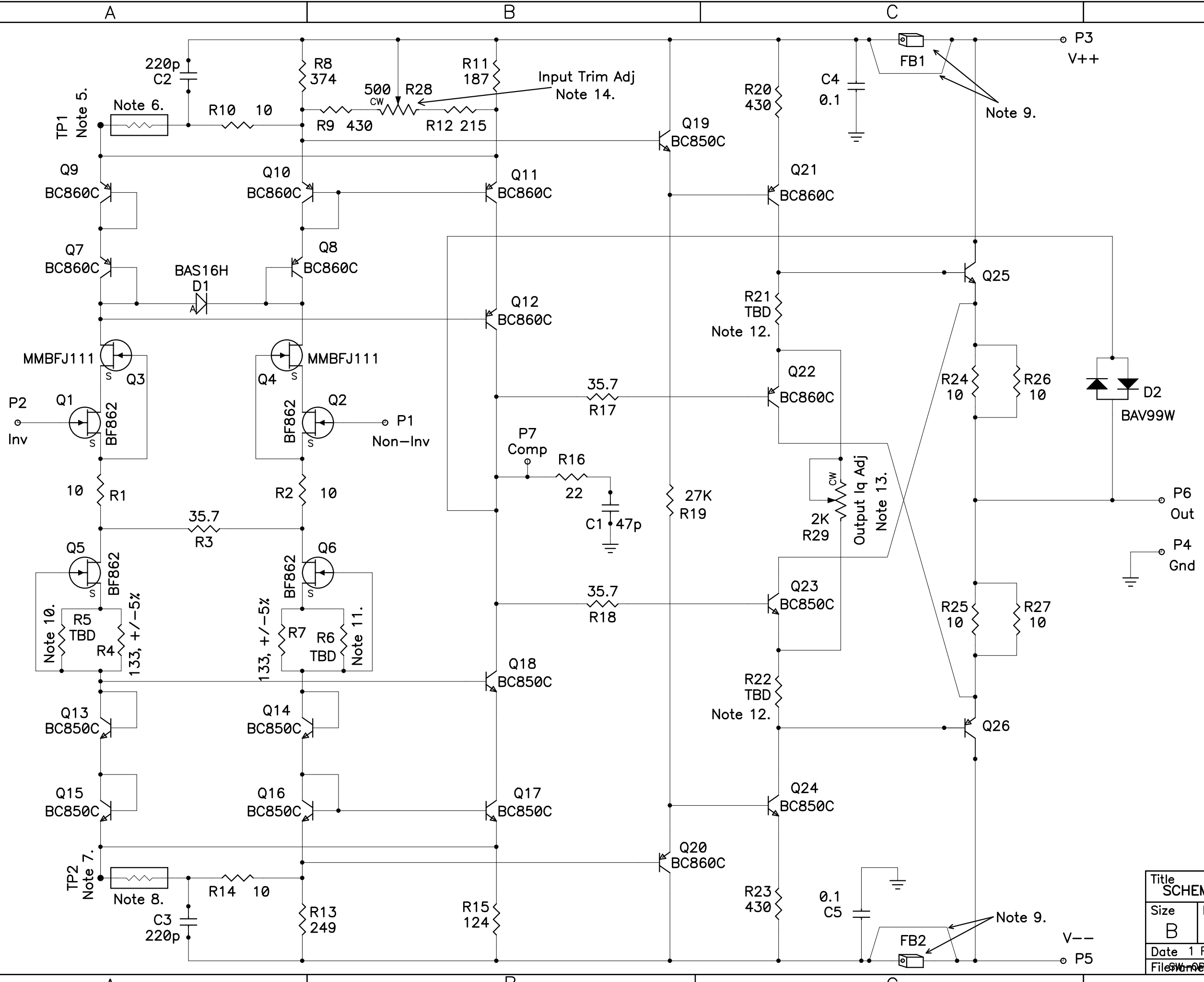
Title SCHEM,SW-OPA DISC OPAMP SMT (1)		
Size B	Number SWOPA2620SCH	Rev B
Date 1 Feb 2013	Drawn by D. Chisholm	
Filename SW-OPA_Discrete_Opamp.SCH		
Sheet 1 of 2		

A

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