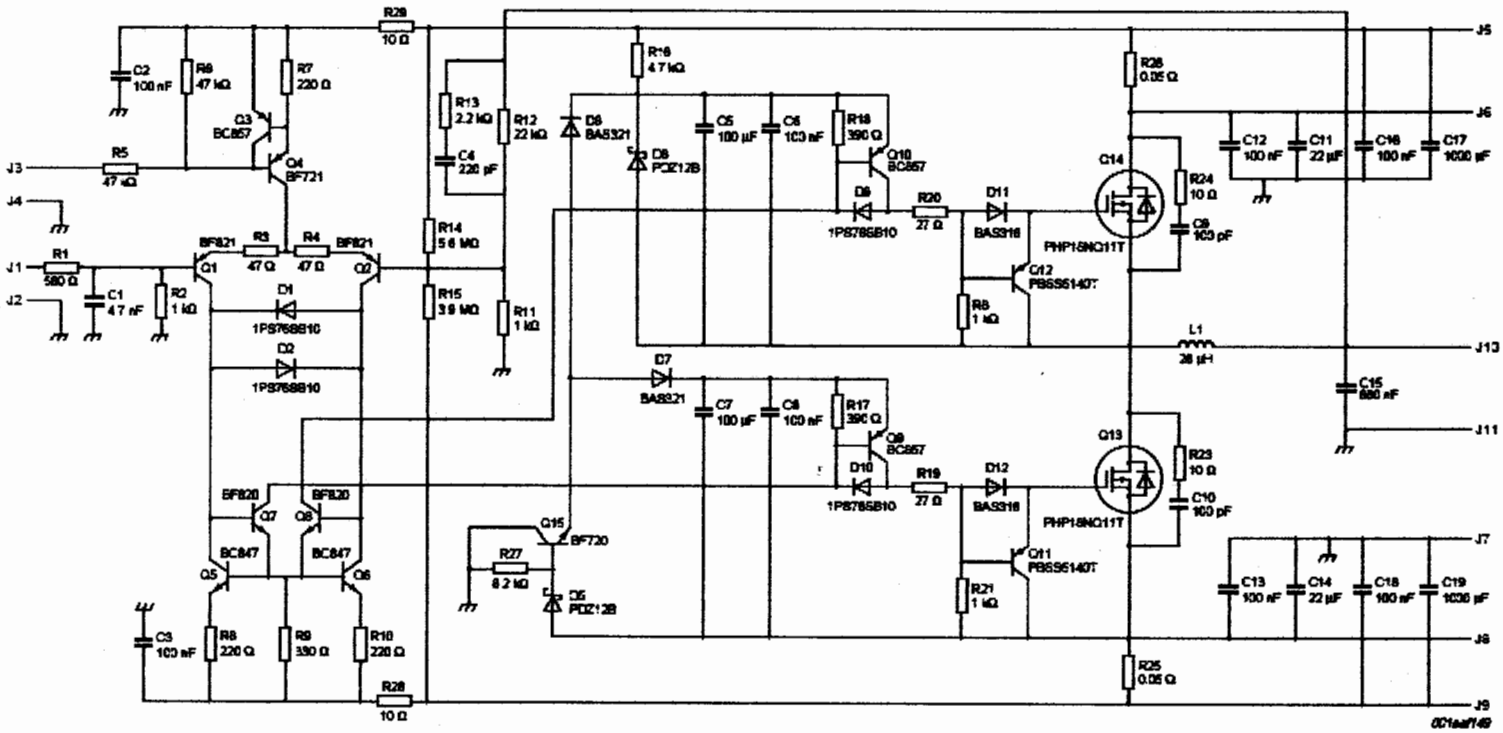
R29
10 Ω
C2
100 nF
R6
47 kΩ
R7
220 Ω
Q3
BC857
Q4
BF721
J3
R5
47 kΩ
J4
J1
R1
560 Ω
C1
4.7 nF
R2
1 kΩ
J2
BF821
Q1
R3
47 Ω
R4
47 Ω
BF821
Q2
D1
1PS76SB10
D2
1PS76SB10
R13
2.2 kΩ
R12
22 kΩ
C4
220 pF
R14
5.6 MΩ
R15
3.9 MΩ
R11
1 kΩ
R16
4.7 kΩ
D6
BAS321
D8
PDZ12B
C5
100 µF
C6
100 nF
R18
390 Ω
Q10
BC857
D9
1PS76SB10
R20
27 Ω
D11
BAS316
Q12
PBSS5140T
R8
1 kΩ
R26
0.05 Ω
C14
PHP18NQ11T
R24
10 Ω
C9
100 pF
J5
J6
C12
100 nF
C11
22 µF
C16
100 nF
C17
1000 µF
L1
39 µH
J13
C15
680 nF
J11
D7
BAS321
C7
100 µF
C8
100 nF
R17
390 Ω
Q9
BC857
D10
1PS76SB10
R19
27 Ω
D12
BAS316
Q11
PBSS5140T
R21
1 kΩ
Q13
PHP18NQ11T
R23
10 Ω
C10
100 pF
J7
C13
100 nF
C14
22 µF
C16
100 nF
C19
1000 µF
J8
R25
0.05 Ω
J9
BF820
Q7
Q8
BF820
BC847
Q5
BC847
Q6
C3
100 nF
R8
220 Ω
R9
390 Ω
R10
220 Ω
R28
10 Ω
Q15
BF720
R27
8.2 kΩ
D5
PDZ12B
001aaf749

Product overview

Package		V_{DS}	$R_{DS(on)}$ @V_{GS}=10V (mΩ)	Q_{rr}	Q_{GD}	C_{iss}	typical Class D amplifier		
PHX34NQ11T		110	40	240	18	1,700	+/- 45V	500	2
PHX27NQ11T		110	50	160	12	1,240	+/- 45V	400	2.5
PHX23NQ11T		110	70	120	10	830	+/- 45V	300	3
PHX18NQ11T	PHP18NQ11T	110	90	135	8	635	+/- 45V	250	4
	PHP28NQ15T	150	63	170	8	1,250	+/- 70V	600	4

200W demo amplifier specifications

Property	Condition	Value
Output power	Supply voltage = ± 45V R_{load} = 4Ω	200W (RMS)
Efficiency	P_{out} = 100W R_{load} = 4Ω	≥ 92%
THD + N	P_{out} = 10W 20Hz < f < 20kHz	≤ 0.03%
SNR		≥ 120dB

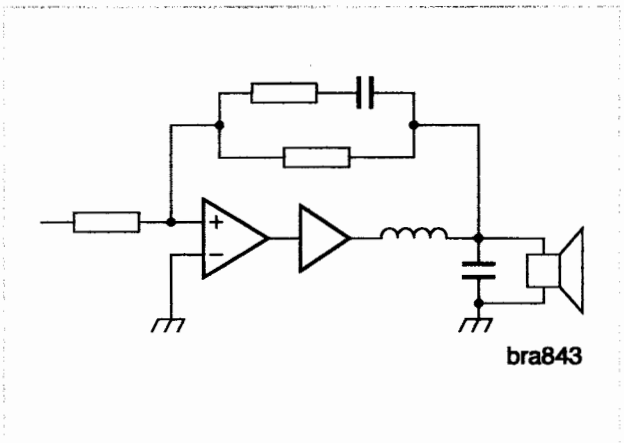

Fig.1 UcD principle diagram

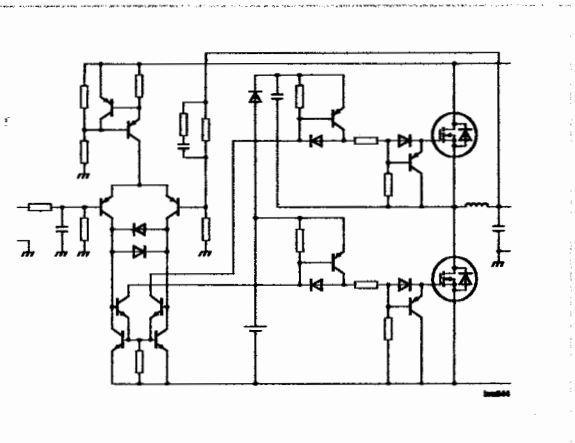

Fig. 2 Basic discrete UcD implementation

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