

Version 2 BIG MUFF - THE "47" Ram's Head

Circuit traced from nine identical examples.
Silicon transistors • Silicon diodes
.047μF caps appear to be polyester film all others ceramic.
All carbon composition resistors.
Linear taper potentiometers.

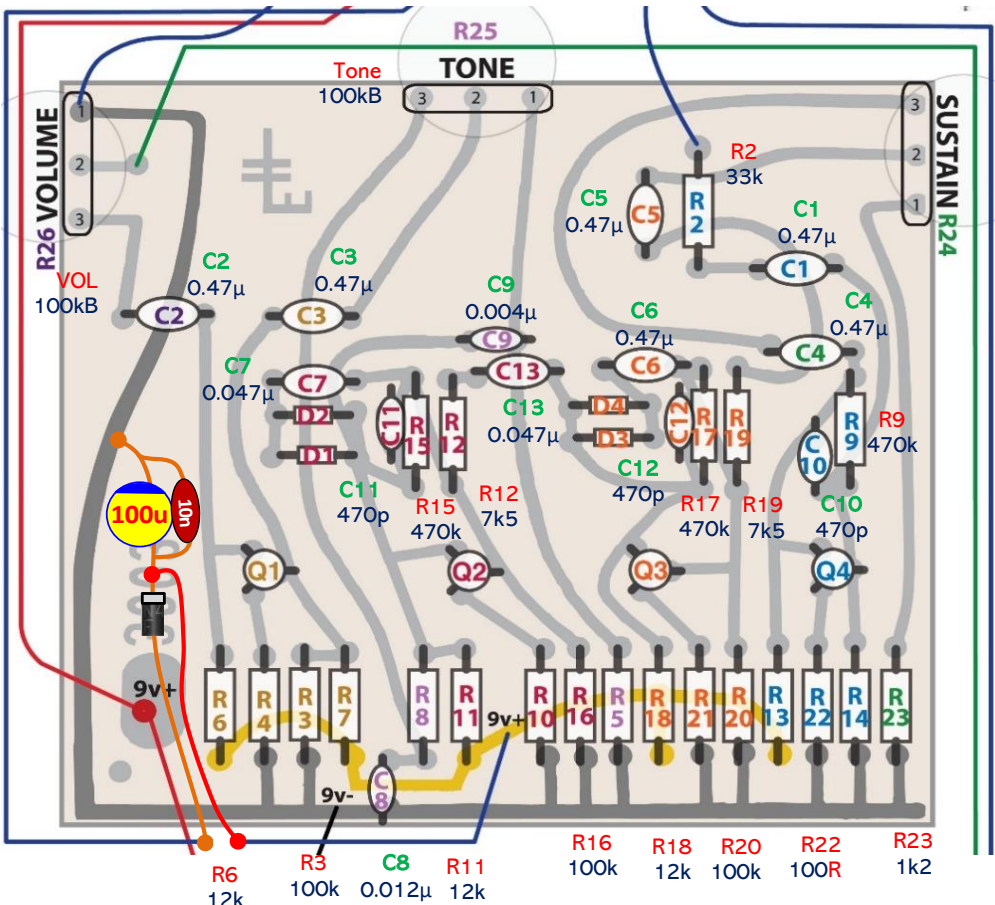
Allen Bradley



Sprague
ceramic capacitors
0.47μF 50V



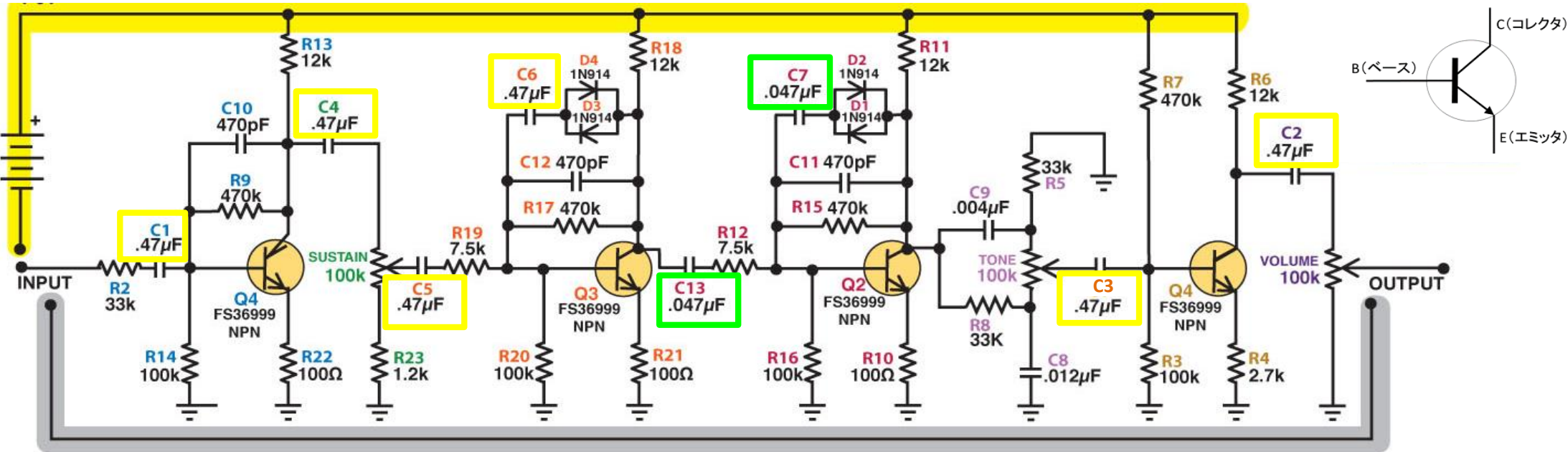
Polyester condense
0.047μF Panasonic



R1	欠番	100R	3
R2	33k	1k2	1
R3	100k	2k7	1
R4	2k7	7k5	2
R5	33k	12k	4
R6	12k	33k	3
R7	470k	100k	4
R8	33k	470k	4
R9	470k		22
R10	100R		
R11	12k		
R12	7k5		
R13	12k		
R14	100k		
R15	470k		
R16	100k		
R17	470k		
R18	12k		
R19	7k5		
R20	100k		
R21	100R		
R22	100R		
R23	1k2		



Type	Mat	Struct	Pc	Vcb	Vce	Veb	Ic	Tj	Ft	Cc	Hfe	Caps
2N3392	Si	NPN	0.2	25	25	5	0.1	125	70	12	150	TO981



C1	0.47u	470p	3
C2	0.47u	4n	1
C3	0.47u	12n	1
C4	0.47u	0.047u	2
C5	0.47u	0.47u	6
C6	0.47u		13
C7	0.047u	1n914	4
C8	12n	2N5133	4
C9	4n		
C10	470p	100u	1
C11	470p	1N5817	1
C12	470p		
C13	0.047u	100kB	3

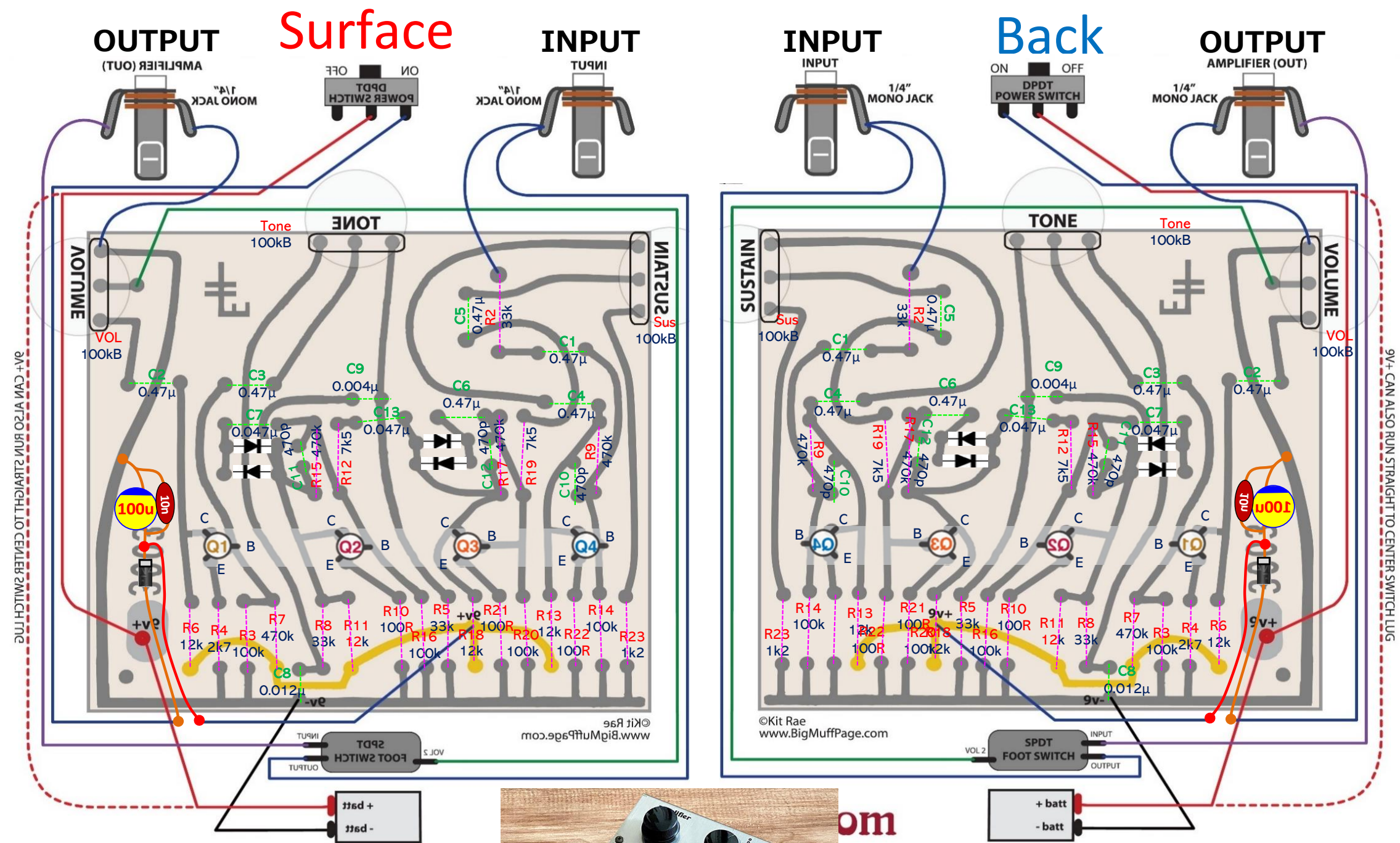


Rams Head Big Muff 2N5133, FS36999 hFE notes

When I pulled all four FS36999 transistors from an exceptional sounding 1973 Big Muff and measured the hFE I found it ranged from 164 to 204 (Q1: 164, Q2: 204, Q3: 183, Q4: 161)."

Version 2 BIG MUFF - THE "47" Ram's Head



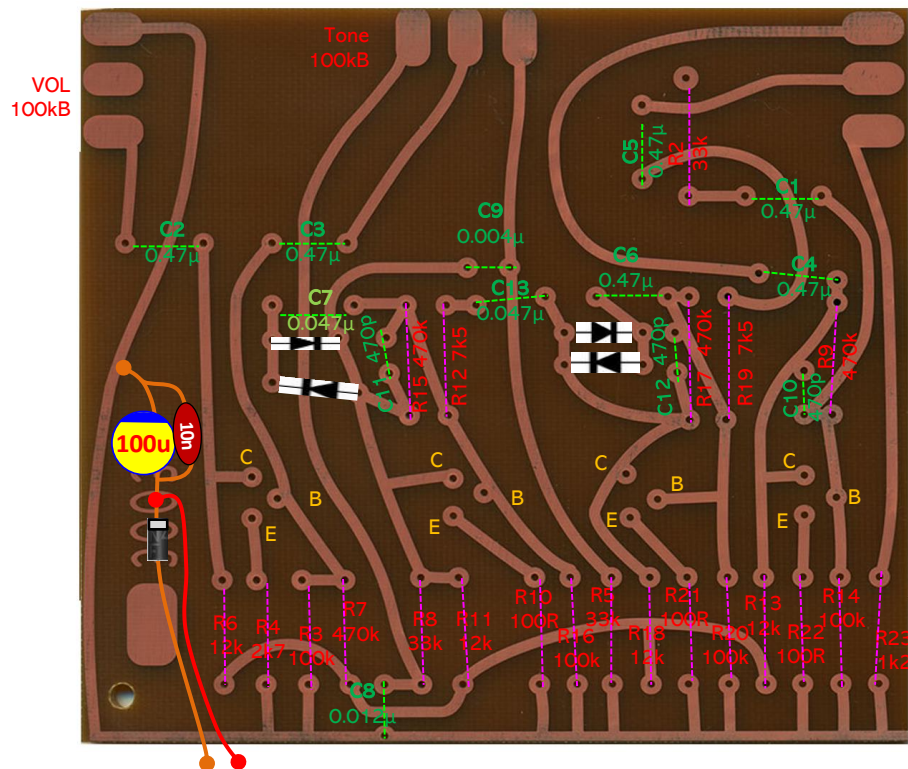


2N3392 pinout

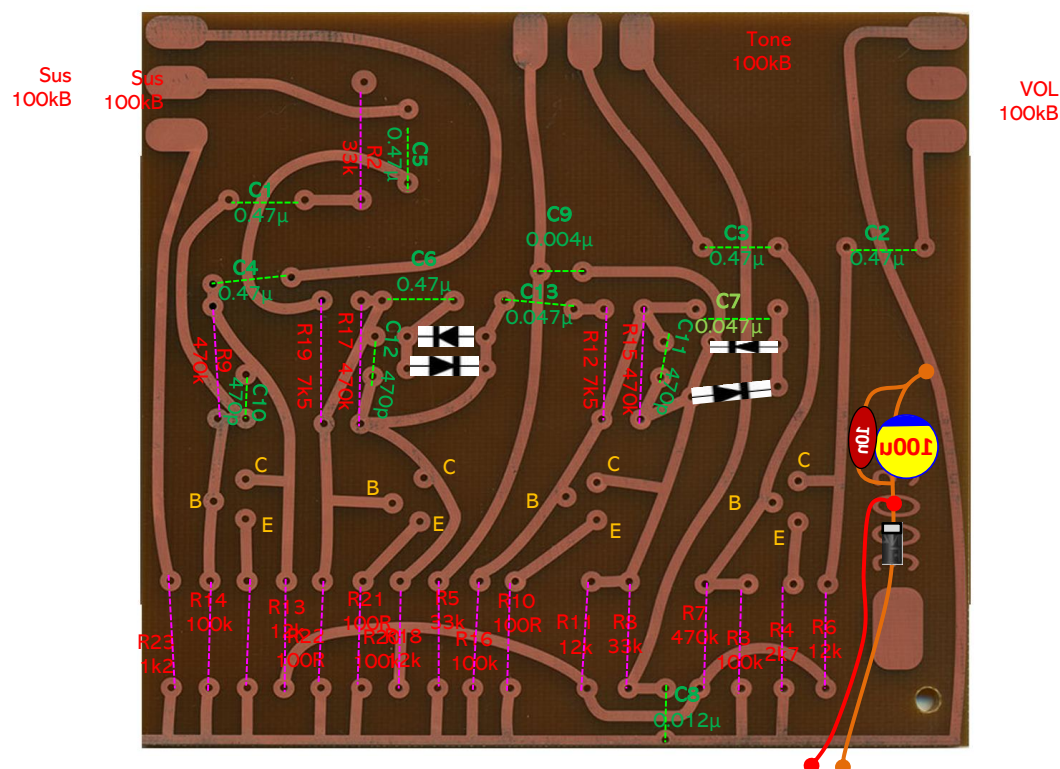
1. Emitter
2. Collector
3. Base



↓ Type	Mat	Struct	Pc	Vcb	Vce	Veb	Ic	Tj	Ft	Cc	Hfe	Caps
2N3392	Si	NPN	0.2	25	25	5	0.1	125	70	12	150	TO981



Surface



Back

Version 2 BIG MUFF - THE "47" Ram's Head

original

↓ Type	Mat	Struct	Pc	Vcb	Vce	Veb	Ic	Tj	Ft	Cc	Hfe	Caps
2N5133	Si	NPN	0.2	20	18	3	0.05	125	40	8	60	TO106

reference

↓ Type	Mat	Struct	Pc	Vcb	Vce	Veb	Ic	Tj	Ft	Cc	Hfe	Caps
2N5172	Si	NPN	0.2	25	25	5	0.1	175	200	10	100	TO981
2N4970	Si	NPN	0.2	50	30	5	0.5	125	200	12	100	TO106
2N4410	Si	NPN	0.31	120	80	5	0.25	135	60	12	60	TO92

↓ Type	Mat	Struct	Pc	Vcb	Vce	Veb	Ic	Tj	Ft	Cc	Hfe	Caps
2N3392	Si	NPN	0.2	25	25	5	0.1	125	70	12	150	TO981



freestompboxes.org
tracing pedals since 2007

[Quick links](#) [FAQ](#)

[Board index](#) [Circuit Analysis](#) [Vintage Stompbox Corner \(... - 1975\)](#)

Rams Head Big Muff 2N5133, FS36999 hFE notes

When I pulled all four **FS36999** transistors from an exceptional sounding 1973 Big Muff and measured the hFE I found it ranged from **164 to 204 (Q1: 164, Q2: 204, Q3: 183, Q4: 161).**"

<https://www.freestompboxes.org/viewtopic.php?t=29469>



2N3392 pinout

1. Emitter
2. Collector
3. Base