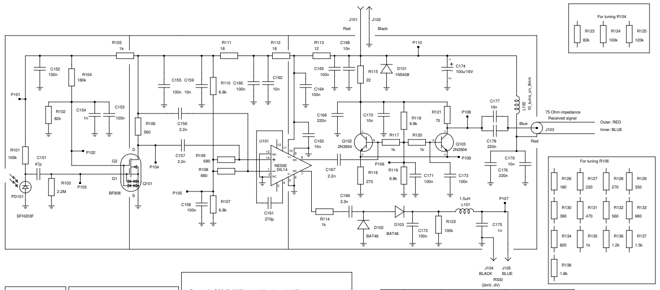
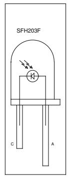
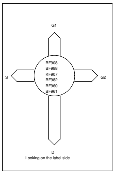

J101
Red
J102
Black
P110
R105
1k
R111
18
R112
18
R113
12
C168
10n
C152
100n
R104
180k
P101
R102
82k
C154
1n
C153
100n
C155
100n
C159
10n
R110
6.8k
C160
100n
C162
10n
C165
100n
C164
100n
R115
22
D101
1N5408
C174
100u/16V
L102
10_turns_on_8mm
R106
560
C156
2.2n
C157
2.2n
R109
680
R108
680
U101
NE592
DIL14
C166
220n
C170
10n
R118
6.8k
R121
75
P108
C177
10n
C178
220n
75 Ohm impedance
Received signal
Blue
J103
Red
Outer: RED
Inner: BLUE
C163
10n
Q102
2N3904
R117
1k
R120
1k
Q103
2N3904
P109
C179
10n
C176
220n
R101
100k
C151
47p
P102
G2
G1
D
S
Q101
BF908
P104
C167
2.2n
P106
R116
270
R119
6.8k
C171
100n
C173
100n
PD101
SFH203F
R103
2.2M
P103
P105
C158
100n
R107
6.8k
C161
270p
C169
3.3n
R114
1k
D102
BAT46
D103
BAT46
C172
100n
R122
100k
1.5uH
L101
P107
C175
1n
J104
BLACK
J105
BLUE
RSSI
(0mV..4V)
For tuning R104
R123
82k
R124
100k
R125
120k
For tuning R106
R126
180
R127
220
R128
270
R129
330
R130
390
R131
470
R132
560
R133
680
R134
820
R135
1k
R136
1.2k
R137
1.5k
R138
1.8k

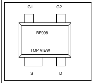
Connect pins 2,6,9,13 of U101 to ground for enhanced stability.

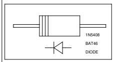
Match gains of Q102 and Q103 to improve performance.

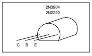
Point	DC voltage minimum	DC voltage maximum	Adjust	Note
P101	P110−0.7V	P110		
P102	3.5V	4V	R104	
P103	0mV	0.1mV		
P104	5V	6V	R106	Measure with RSSI <2V
P105	P110/2−0.5V	P110/2+0.5V		
P106	P110/2−0.7V	P110/2+0.5V		
P107	0V no signal	4V overdrive		Also called RSSI. 0V may be like 60mV, varies piece to piece
P108	P110−1.3V	P110−0.9V		
P109	P106−0.8V	P106−0.6V		
P110	11.5V	12.5V		

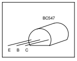


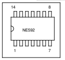

G1
BF908
BF988
KF907
BF982
BF960
BF961
S
G2
D
Looking on the label side


G1
G2
BF998
TOP VIEW
S
D


1N5408
BAT46
DIODE


2N3904
2N2222
C
B
E




14
8
NE592
1
7

RONJA

TITLE Ronja 10M Receiver

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