

## Bill of materials for SoftRock v6 Exciter PA board, 40m

Design by: Jan (G0BBL), Alan (M0PUB) and John (G8BTR)

BOM prepared by: Tony, KB9YIG, 9/28/06

|  | used where                                   | quantity        |                           |
|--|--|-----------------|---------------------------|
| <b>Resistors</b>                           |  |                 |                           |
| 2.21k, 1/4W, 1%                            | R1   | 1               |                           |
| 475, 1/4W, 1%                              | R2, R6                                       | 2               |                           |
| 22.1, 1/4W, 1%                             | R3   | 1               |                           |
| 68.1, 1/4W, 1%                             | R4   | 1               |                           |
| 15, 1/4, 1%                                | R5   | 1               |                           |
| 2k pot                                     | R7   | 1               |                           |
| 1.0, 1/4W, 5%                              | R8   | 1               |                           |
| <b>Capacitors</b>                          | <b>used where</b>                            | <b>quantity</b> |                           |
| 1500pF ceramic, 5%                         | C1, C4                                       | 2               |                           |
| 120pF ceramic, 5%                          | C2   | 1               |                           |
| 0.1uF, ceramic, 10%                        | C3, C7, C12                                  | 3               |                           |
| 0.1uF, smt 1206                            | C5, C8, C10, C11, C24                        | 5               | one spare provided in kit |
| 0.01uF ceramic, 5%                         | C6   | 1               |                           |
| 10uF/16 VDC Electrolytic                   | C9, C16, C17, C18, C19, C20, C21, C22, C23   | 9               |                           |
| 470pF ceramic, 5%                          | C13, C15                                     | 2               |                           |
| 820pF ceramic, 5%                          | C14  | 1               |                           |
| <b>Inductors / transformers</b>            | <b>used where</b>                            | <b>quantity</b> |                           |
| 0.35uH, T25-2 core (red), 10T, #30 wire    | L1   | 1               |                           |
| 4.5uH, T25-2 core (red), 36T, #30 wire     | L2   | 1               |                           |
| 35uH, 10T, #26 on FT3743 core (gray)       | L3   | 1               |                           |
| 1.1uH, T30-2 core (red), 16T of #26        | L4, L5                                       | 2               |                           |
| each bifilar primary winding 4T, #30 wire  | T1   | 1               |                           |
| 9T secondary on T30-2 core, #30 wire       | T1   |                 |                           |
| 4T each, #30 wire on BN-43-2402 core       | T2   | 1               |                           |
| 10uH molded inductor                       | RFC1   | 1               |                           |
| 4T, #26 wire on BN-43-2402 core            | RFC2   | 1               |                           |
| Wire, AWG #26                              |  | 8 feet          |                           |
| Wire, AWG #30                              |  | 8 feet          |                           |
| <b>Transistors</b>                         | <b>used where</b>                            | <b>quantity</b> |                           |
| 2N2222, TO18                               | Q1   | 1               |                           |
| 2N3866, TO39                               | Q2   | 1               |                           |
| <b>Diodes</b>                              | <b>used where</b>                            | <b>quantity</b> |                           |
| 1N4003                                     | D1   | 1               |                           |
| <b>Connectors</b>                          | <b>used where</b>                            | <b>quantity</b> |                           |
| three-pin header sockets, 0.1 inch centers | P1, P3                                       | 2               |                           |
| five-pin header sockets, 0.1 inch centers  | P2   | 1               |                           |
| <b>Circuit boards</b>                      | <b>used where</b>                            | <b>quantity</b> |                           |
| SR_v6_pa                                   | PA circuit board                             | 1               |                           |
| <b>Hardware</b>                            | <b>used where</b>                            | <b>quantity</b> |                           |
| Clip-on TO-18 heatsink                     | on Q1 prior to soldering transistor to board | 1               |                           |
| Clip-on TO-39 heatsink                     | on Q2 prior to soldering transistor to board | 1               |                           |

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| 2N3866, TO39                               | Q2   | 1               |                           |
| <b>Diodes</b>                              | <b>used where</b>                            | <b>quantity</b> |                           |
| 1N4003                                     | D1   | 1               |                           |
| <b>Connectors</b>                          | <b>used where</b>                            | <b>quantity</b> |                           |
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| five-pin header sockets, 0.1 inch centers  | P2   | 1               |                           |
| <b>Circuit boards</b>                      | <b>used where</b>                            | <b>quantity</b> |                           |
| SR_v6_pa                                   | PA circuit board                             | 1               |                           |
| <b>Hardware</b>                            | <b>used where</b>                            | <b>quantity</b> |                           |
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| Clip-on TO-39 heatsink                     | on Q2 prior to soldering transistor to board | 1               |                           |