

VHF Phase Lock Loop Exciter - Parts List

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<u>SYMBOL</u>	<u>DESCRIPTION</u>
C101	Capacitor, Polyester, 0.01uF, +/-10%, 50 VDC
C102	Capacitor, Tantalum, 22uF, +/-20%, 15 VDC
C103	Capacitor, Polyester, 0.01uF, +/-10%, 50 VDC
C104-C112	Capacitor, Ceramic disk, 470pF, +/-10%, 1000 VDC
C113	Capacitor, Tantalum, 1uF, +/-20%, 35 VDC
C115	Capacitor, Ceramic disk, 1000pF, +/-20%, 1000 VDC
C116	Capacitor, Ceramic disk, 680pF, +/-10%, 1000 VDC
C117	Capacitor, Tantalum, 1uF, +/-20%, 35 VDC
C118	Capacitor, Mica, 47pF, +/-5%, 500 VDC
C119	Capacitor, Mica, 47pF, +/-5%, 500 VDC
C120	Capacitor, Ceramic disk, 680pF, +/-10%, 1000 VDC
C121	Capacitor, Ceramic disk, 680pF, +/-10%, 1000 VDC
C122	Capacitor, Tantalum, 1uF, +/-20%, 35 VDC
C123	Capacitor, Ceramic disk, 680pF, +/-10%, 1000 VDC
C124	Capacitor, Ceramic disk, 680pF, +/-10%, 1000 VDC
C125	Capacitor, Polyester, 0.022uF, +/-10%, 50 VDC
C126	Capacitor, Tantalum, 22uF, +/-20%, 15 VDC
C127	Capacitor, Ceramic disk, 680pF, +/-10%, 1000 VDC
C128	Capacitor, Tantalum, 3.3uF, +/-20%, 10 VDC
C129	Capacitor, Ceramic disk, 1000pF, +/-20%, 1000 VDC
C130	Capacitor, Tantalum, 0.47uF, +/-10%, 35 VDC
C131	Capacitor, Tantalum, 22uF, +/-20%, 15 VDC
C132	Capacitor, Teflon/Mica, 220pF, +/-5%, 250 VDC
C133	Capacitor, Silver/Mica, 470pF, +/-5%, 250 VDC
C134	Capacitor, Polyester, 0.01uF, +/-10%, 50 VDC
C135	Capacitor, Ceramic disk, 680pF, +/-10%, 1000 VDC
C136	Capacitor, Ceramic, 0.01uF, +/-20%, 50 VDC
C137	Capacitor, Ceramic, 0.01uF, +/-20%, 50 VDC
C138	Capacitor, Silver/Mica, 330pF, +/-5%, 500 VDC
C139	Capacitor, Silver/Mica, 27pF, +/-10%, 500 VDC
C140	Capacitor, Mica, 270pF, +/-5%, 500 VDC
C141	Capacitor, Tantalum, 22uF, +/-20%, 15 VDC
C142	Capacitor, Mica, 20pF, +/-5%, 500 VDC
C143	Capacitor, Ceramic disk, 1000pF, +/-20%, 1000 VDC
C144	Capacitor, Mica, 270pF, +/-5%, 500 VDC
C145	Capacitor, Ceramic, 0.01uF, +/-20%, 50 VDC
C146	Capacitor, Polyester, 0.01uF, +/-10%, 50 VDC
C147	Capacitor, Ceramic Disk, 470pF, +/-10%, 1000 VDC
C148	Capacitor, Mica, 12pF, +/-5%, 500 VDC
C149	Capacitor, Mica, 150pF, +/-5%, 500 VDC
C150	Capacitor, Polyester, 0.01uF, +/-10%, 50 VDC
C151	Capacitor, Ceramic Disk, 470pF, +/-10%, 1000 VDC
C152	Capacitor, Polyester, 0.01uF, +/-10%, 50 VDC
C153	Capacitor, Tantalum, 1uF, +/-20%, 25 VDC
C154	Capacitor, Tantalum, 22uF, +/-20%, 15 VDC
C155	Capacitor, Polyester, 0.01uF, +/-10%, 50 VDC
C156	Capacitor, Polyester, 0.01uF, +/-10%, 50 VDC
C157	Capacitor, Polyester, 0.01uF, +/-10%, 50 VDC
C158	Capacitor, Tantalum, 1uF, +/-20%, 35 VDC
C159	Capacitor, Ceramic disk, 1000pF, +/-20%, 1000 VDC
C160	Capacitor, Polyester, 0.01uF, +/-10%, 50 VDC
C161	Capacitor, Polyester, 0.0022uF, +/-10%, 50 VDC
C162	Capacitor, Tantalum, 1uF, +/-20%, 35 VDC

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<u>SYMBOL</u>	<u>DESCRIPTION</u>
C163	Capacitor, Ceramic disk, 1000pF, +/-20%, 1000 VDC
C164	Capacitor, Ceramic disk, 1000pF, +/-20%, 1000 VDC
C165	Capacitor, Ceramic disk, 1000pF, +/-20%, 1000 VDC
C166	Capacitor, Ceramic disk, 1000pF, +/-20%, 1000 VDC
C167	Capacitor, Polyester, 0.015uF, +/-10%, 50 VDC
C168	Capacitor, Ceramic Disk, 470pF, +/-10%, 1000 VDC
C169	Capacitor, Tantalum, 1uF, +/-20%, 35 VDC
C170	Capacitor, Polyester, 0.01uF, +/-10%, 50 VDC
C171	Capacitor, Silver/Mica, 27pF, +/-5%, 500 VDC
C172	Capacitor, Ceramic, 7uF, +/-5%, 100 VDC
C173	Capacitor, Ceramic, 6uF, +/-5%, 100 VDC
C174	Capacitor, Ceramic, 8.2uF, +/-5%, 100 VDC
C175	Capacitor, Tantalum, 10uF, +/-20%, 16 VDC
*****	*****
CR102	Diode, Silicon, Sim to GE #19A700073P1
CR104	Diode, Silicon, Fast recovery, 225ma, 50 PIV
CR105	Diode, Silicon, Fast recovery, 225ma, 50 PIV
CR106	Diode, Silicon, Fast recovery, 225ma, 50 PIV
CR107	Diode, Silicon, Fast recovery, 225ma, 50 PIV
CR108	Diode, Silicon, Fast recovery, 225ma, 50 PIV
CR109	Diode, LED, Red, Sim to GE #162B3011P0002
*****	*****
L101	Coil, RF, Variable, Sim to GE #19B209595P502, w/ ferrite core, thread size 6-32
L102	Coil, RF, 1.0 uH, +/-10%
L103	Coil, Sim to GE #19A130997P1
L104	Coil, Sim to GE #19A130996P1
L105	Coil, Sim to GE #19A130997P1
L106	Coil, RF, 0.10uH, +/-5%, 0.08 ohms DC resistance max.
L108	Coil, RF, 1uH, +/-10%
L109	Coil, Sim to GE #19A143019P1
L110	Coil, Sim to GE #19A143019P1
L111	Coil, Sim to GE #19A143019P1
*****	*****
Q101	Transistor, Silicon, 2N3904
Q102	Transistor, Silicon, 2N3906
Q103	Transistor, Silicon, 2N3251
Q104	Transistor, Silicon, 2N3904
Q105	Transistor, Silicon, 2N3904
Q106	Transistor, Silicon, 2N3906
Q107	Transistor, FET, N Type, Sim to GE19A134402P1
Q108	Transistor, FET, N Type, Sim to GE19A134402P1
Q109	Transistor, Silicon, 2N3904
Q110	Transistor, Silicon, NPN, Sim to GE19A702613P1
Q111	Transistor, Silicon, NPN, Sim to GE19A116201P1
Q112	Transistor, Silicon, 2N4427
Q113	Transistor, Silicon, 2N2904A
Q114	Transistor, Silicon, 2N3904
Q115	Transistor, Silicon, 2N3053
Q116	Transistor, Silicon, 2N2904A
Q117	Transistor, Silicon, 2N5210
Q118	Transistor, Silicon, 2N5210
*****	*****

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<u>SYMBOL</u>	<u>DESCRIPTION</u>
R101	Resistor, Composition, 620 ohms, +/-5%, 1/4 W.
R102	Resistor, Composition, 1k ohms, +/-5%, 1/4 W.
R103	Resistor, Variable, Carbon film, 200-5k ohms, +/-10%, 1/4 W.
R104	Resistor, Variable, Carbon film, 200-5k ohms, +/-10%, 1/4 W.
R105	Resistor, Composition, 39k ohms, +/-5%, 1/4 W.
R106	Resistor, Metal film, 4.22k ohms, +/-1%, 250 VDC, 1/4 W.
R107	Resistor, Metal film, 500 ohms, +/-1%, 1/4 W.
R108	Resistor, Metal film, 18.7k ohms, +/-1%, 250 VDC, 1/4 W.
R109	Resistor, Metal film, 6.19k ohms, +/-1%, 1/4 W.
R110	Resistor, Metal film, 51.1 ohms, +/-1%, 1/4 W.
R111	Resistor, Composition, 1k ohms, +/-5%, 1/4 W.
R112	Resistor, Composition, 51 ohms, +/-5%, 1/4 W.
R113	Resistor, Composition, 1.5k ohms, +/-5%, 1/4 W.
R114	Resistor, Composition, 1.5k ohms, +/-5%, 1/4 W.
R115	Resistor, Composition, 1.5k ohms, +/-5%, 1/4 W.
R116	Resistor, Composition, 75 ohms, +/-5%, 1/4 W.
R117	Resistor, Composition, 51 ohms, +/-5%, 1/4 W.
R118	Resistor, Composition, 1k ohms, +/-5%, 1/4 W.
R119	Resistor, Composition, 1.1k ohms, +/-5%, 1/4 W.
R120	Resistor, Metal film, 7.15k ohms, +/-1%, 250 VDC, 1/4 W.
R121	Resistor, Metal film, 1k ohms, +/-1%, 1/4 W.
R122	Resistor, Composition, 110 ohms, +/-5%, 1/4 W.
R123	Resistor, Composition, 36 ohms, +/-5%, 1/4 W.
R124	Resistor, Composition, 110 ohms, +/-5%, 1/4 W.
R125	Resistor, Metal film, 825 ohms, +/-1%, 250 VDC, 1/4 W.
R126	Resistor, Composition, 1.1k ohms, +/-5%, 1/4 W.
R127	Resistor, Metal film, 698 ohms, +/-1%, 250 VDC, 1/4 W.
R128	Resistor, Metal film, 4.22k ohms, +/-1%, 1/4 W.
R129	Resistor, Composition, 2.2k ohms, +/-5%, 1/4 W.
R130	Resistor, Composition, 510 ohms, +/-5%, 1/4 W.
R131	Resistor, Composition, 1.8k ohms, +/-5%, 1/4 W.
R132	Resistor, Composition, 30 ohms, +/-5%, 1/4 W.
R133	Resistor, Metal film, 23.7k ohms, +/-1%, 1/4 W.
R134	Resistor, Composition, 20 ohms, +/-5%, 1/4 W.
R135	Resistor, Metal film, 17.8 ohms, +/-1%, 250 VDC, 1/4 W.
R136	Resistor, Composition, 510 ohms, +/-5%, 1/4 W.
R137	Resistor, Composition, 160 ohms, +/-5%, 1/4 W.
R138	Resistor, Composition, 160 ohms, +/-5%, 1/4 W.
R140	Resistor, Composition, 1.3k ohms, +/-5%, 1/4 W.
R141	Resistor, Composition, 300 ohms, +/-5%, 1/4 W.
R142	Resistor, Composition, 22 ohms, +/-5%, 1/4 W.
R143	Resistor, Composition, 220 ohms, +/-5%, 1/4 W.
R144	Resistor, Composition, 4.7 ohms, +/-5%, 1/2 W.
R145	Resistor, Composition, 390 ohms, +/-5%, 1/4 W.
R146	Resistor, Metal film, 5.9k ohms, +/-1%, 1/4 W.
R147	Resistor, Composition, 75 ohms, +/-5%, 1/4 W.
R148	Resistor, Composition, 75 ohms, +/-5%, 1/4 W.
R149	Resistor, Composition, 270 ohms, +/-5%, 1/4 W.
R150	Resistor, Composition, 3.3k ohms, +/-5%, 1/4 W.
R151	Resistor, Composition, 10 ohms, +/-5%, 1/4 W.
R152	Resistor, Composition, 510 ohms, +/-5%, 1/4 W.
R153	Resistor, Composition, 560 ohms, +/-5%, 1/4 W.
R154	Resistor, Composition, 51 ohms, +/-5%, 1/4 W.

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<u>SYMBOL</u>	<u>DESCRIPTION</u>
R155	Resistor, Composition, 2.2k ohms, +/-5%, 1/4 W.
R156	Resistor, Composition, 2.2k ohms, +/-5%, 1/4 W.
R157	Resistor, Composition, 10k ohms, +/-5%, 1/4 W.
R158	Resistor, Composition, 510 ohms, +/-5%, 1/4 W.
R159	Resistor, Composition, 10 ohms, +/-5%, 1/4 W.
R160	Resistor, Composition, 360 ohms, +/-5%, 1/4 W.
R161	Resistor, Composition, 10 ohms, +/-5%, 1/4 W.
R162	Resistor, Composition, 20k ohms, +/-5%, 1/4 W.
R163	Resistor, Composition, 820 ohms, +/-5%, 1/4 W.
R164	Resistor, Composition, 6200 ohms, +/-5%, 1/4 W.
R165	Resistor, Metal film, 422 ohms, +/-1%, 1/4 W.
R166	Resistor, Composition, 510 ohms, +/-5%, 1/4 W.
R167	Resistor, Composition, 1.5k ohms, +/-5%, 1/4 W.
R168	Resistor, Composition, 220 ohms, +/-5%, 1/4 W.
R169	Resistor, Composition, 360 ohms, +/-5%, 1/4 W.
R170	Resistor, Composition, 100 ohms, +/-5%, 1/4 W.
R171	Resistor, Variable, Cermet, 200 ohms, +/-10%, 1/2 W.
*****	*****
RT101	Thermistor, 50 ohms, +/-10%, color code blue
RT102	Thermistor, 2200 ohms, +/-5%, color code yellow
*****	*****
T101	Coil, Sim to GE #19A130998G1
*****	*****
U101	Linear Phase Detector, Sim to GE #19A116787P2
U102	Digital Frequency Divider, Sim to GE #19A134213P1
*****	*****
VR101	Diode, Zener, 500 mW, 4.4 V
*****	*****
Y101	Oscillator, Externally compensated, 5 PPM, 150.8-174 MHZ