



NOTES:  
 1. RESISTANCE VALUES ARE IN OHMS, CAPACITANCE IN MICRO FARADS, UNLESS OTHERWISE SPECIFIED.  
 2. VOLTAGES ARE MEASURED USING B+ COMMON POINT ON PRINTED BOARD, SQUELCH AT MINIMUM (CCW), VOLUME AT MAXIMUM (CW), 50 OHM DUMMY LOAD CONNECTED TO J1, POWER SUPPLY AT 13.8 V.  
 ALL VOLTAGES MEASURED WITH HP 410C.  
 3. POWER INPUT TO Q14 =  $V_{ce} I_e = 12.3(405) = 5 \text{ W}$ .  
 4. SEE MANUAL FOR POLARITY REVERSAL.  
 5. \* VALUES MAY BE FACTORY ADJUSTED.  
 6. Δ VOLTAGE INCLUDED FOR REFERENCE ONLY AND DOES NOT NECESSARILY INDICATE ACTUAL OPERATING CONDITIONS.  
 7. CRYSTAL FREQUENCIES IN MHz

**MESSENGER 123 SCHEMATIC DIAGRAM**  
 (FOR UNITS WITH "G" MODEL DESIGNATOR  
 ON SERIAL NUMBER STICKER)