

SECTION 6 ALIGNMENT PROCEDURE AND PERFORMANCE TESTS

6.1 GENERAL

Receiver or transmitter alignment may be necessary if repairs are made that could affect tuning. Alignment points diagrams are located in Figure 6-3 or component layouts are located in Section 8.

Fabricate test cables by referring to Figure 2-1. This cable should include power and ground, a transmit keying switch that shorts the keying line to ground, data input and data output. The test setup must apply the various supply voltages and load the synthesizer with channel information.

6.2 DL3474 TRANSCEIVER ONLY

6.2.1 FREQUENCY AND CONTROL LINE VOLTAGE CHECK

1. Connect the test setup shown in Figure 6-1. Set the power supply for +7.5V DC. See Figure 2-1 for interface cable.
2. Load the synthesizer with the channel frequency (see Section 3.2).
3. Connect a DC voltmeter at the junction of R808/C815 to measure the VCO control line voltage for a meter reading of $\geq 0.50 - \leq 4.90$ V DC (see Figure 6-3).
4. Key the transmitter.
5. Measure the VCO control line voltage for a meter reading of $\geq 0.75 - \leq 5.00$ V DC
6. Unkey the transmitter.

* 6.2.2 2W TRANSMITTER POWER ALIGNMENT

1. Connect the test setup shown in Figure 6-1. A DC ammeter capable of measuring up to 1.5A should be installed in the supply line.
2. Load the synthesizer with the center channel frequency.

3. Key the transmitter and make sure that the supply voltage at the RF board is 7.5V.
(Do not transmit for extended periods.)
4. Adjust C553 counterclockwise for minimum current.
5. Connect a voltmeter to the junction of R542/R5
6. Adjust R542 clockwise for 2.30V DC (± 0.1 V DC).
7. Readjust C553 counterclockwise for minimum current.
8. Tune C527 clockwise for maximum power.
9. Tune C553 clockwise for 2.0W (± 0.1 W). Current should be less than 900 mA. (Power output should be 1.6-2.4W and current less than 900 mA from 403-512 MHz.)
10. Monitor the frequency with a frequency counter adjust TCXO (Y801) for the channel frequency ± 100 Hz.

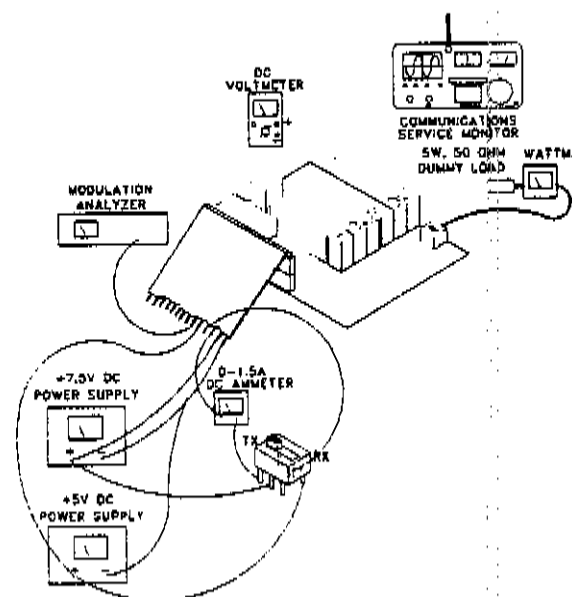


Figure 6-1 TRANSMITTER TEST SETU

6.2.3 LOW POWER ALIGNMENT

1. Connect the test setup shown in Figure 6-1.
2. Load the synthesizer with the center channel frequency.
3. Connect a voltmeter to the junction of R542/R543.
4. Adjust R542 clockwise for -1.5V DC ($\pm 0.1V$ DC).
5. Tune C527 clockwise for maximum power.
6. Tune C553 clockwise for minimum power.
7. Adjust R542 for the required power level.
8. Tune C527 for power balance at frequencies which are as close as possible to ± 5 MHz from the center of the channel frequency.
9. Re-adjust R542 for the power level required if necessary.
10. Monitor the frequency with a frequency counter and adjust TCXO (Y801) for the channel frequency ± 100 Hz.

6.2.4 MODULATION FLATNESS ALIGNMENT

1. Inject a 220 Hz square-wave tone at approximately 0.35V P-P, biased at 2.5V DC on J201, pin 6.
2. Transmit into the modulation analyzer and observe modulation output on the oscilloscope. Set the modulation analyzer high pass filtering off and no less than a 15 kHz low pass filter.
3. Adjust R810 for a flat square-wave on the oscilloscope.
4. Inject a 1 kHz sine-wave on J201, pin 6, biased at 2.5V DC, at the level below according to the bandwidth:
 - 0.200V RMS for 12.5 kHz BW (-X10 Radios)
 - 0.330V RMS for 20.0 kHz BW (-X20 Radios)
 - 0.400V RMS for 25.0 kHz BW (-X30 Radios)
5. Switch on TX Modulation. Set the modulation analyzer for 3 kHz low pass filtering.

6. The transmit deviation should measure between:
 - $\pm 1.2/\pm 1.9$ kHz for 12.5 kHz BW (-X10 Radios)
 - $\pm 1.9/\pm 3.0$ kHz for 20.0 kHz BW (-X20 Radios)
 - $\pm 2.4/\pm 3.8$ kHz for 25.0 kHz BW (-X30 Radios)
7. Set a 0 dB reference on the Audio Analyzer.
8. Input a 100 Hz sine-wave. The level should be within ± 1.5 dB of the 1 kHz reference.
9. Remove transmit modulation and unkey the transmitter.
10. Connect a DC voltmeter at the junction of R807/R855.
11. Adjust R855 to 2.10V DC ($\pm 0.05V$ DC).

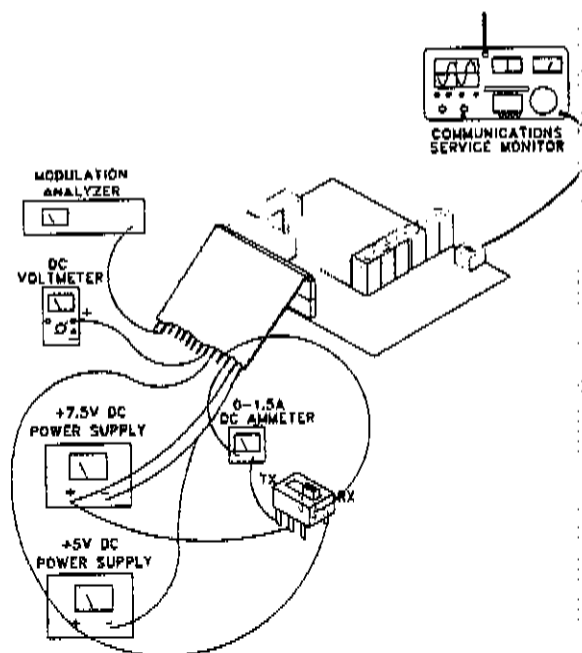


Figure 6-2 RECEIVER TEST SETUP

6.2.5 RECEIVER ALIGNMENT

CAUTION

Do not key the transmitter with the generator connected because severe generator damage may result.

1. Connect the test setup shown in Figure 6-2. Adjust the power supply for +7.5V DC.

2. Measure the receive current drain. (Typically current should be <80 mA.)
3. Preset tuning slugs of L222/L224 to the full clockwise position (slug in all the way).
4. Preset C232 to center position (slot in-line with axis of part).
5. Readjust L224 counterclockwise 2 turns.

6.2.6 IF AND AUDIO ADJUSTMENTS

1. Load the synthesizer with the channel frequency.
2. Set the RF signal generator for this frequency with a 1 kHz tone (modulated output shown below) at a level of -47 dBm (1000 μ V) and inject into J501.
 - 1.5 kHz deviation (-X10 12.5 kHz BW Radio)
 - 2.4 kHz deviation (-X20 20.0 kHz BW Radio)
 - 3.0 kHz deviation (-X30 25.0 kHz BW Radio)

NOTE: Maintain these deviation levels throughout the test when measuring AC levels, SINAD and % distortion.

3. Adjust L242 for 2.5V DC (± 0.05 V DC) at the receive audio output.
4. Set the RF signal generator level to -105 dBm, "unmodulated".
5. Set the generator frequency 3 kHz below channel center (-X10) or 5 kHz below channel center (-X20/-X30).

6. Adjust C232, then L222 for peak RSSI voltage.

NOTE: Use 2V scale on DVM.

7. Set the RF signal generator frequency back to channel center at -47 dBm with standard deviation level.
8. Adjust L224 for minimum distortion.
9. Set the RF signal generator to -105 dBm, "unmodulated".
10. Adjust L222 for peak RSSI voltage.

NOTE: Use 2V scale on DVM.

11. Adjust deviation to the level in Step 2. Record RMS voltage level _____ RMS. (Typically: mV ± 50 mV.)
12. Record the percent distortion _____. (Typically <3%.)
13. Adjust the RF input level until 12 dB SINAD is measured. (Typically <0.45 μ V).
14. Adjust the generator RF level to -120 dBm and measure DC (RSSI) voltage on J201, pin 12. (Typically ≤ 0.90 V DC.)
15. Adjust the generator RF level to -60 dBm and measure DC (RSSI) voltage on J201, pin 12. (Typically ≥ 2.40 V DC.)

ALIGNMENT PROCEDURE AND PERFORMANCE TESTS

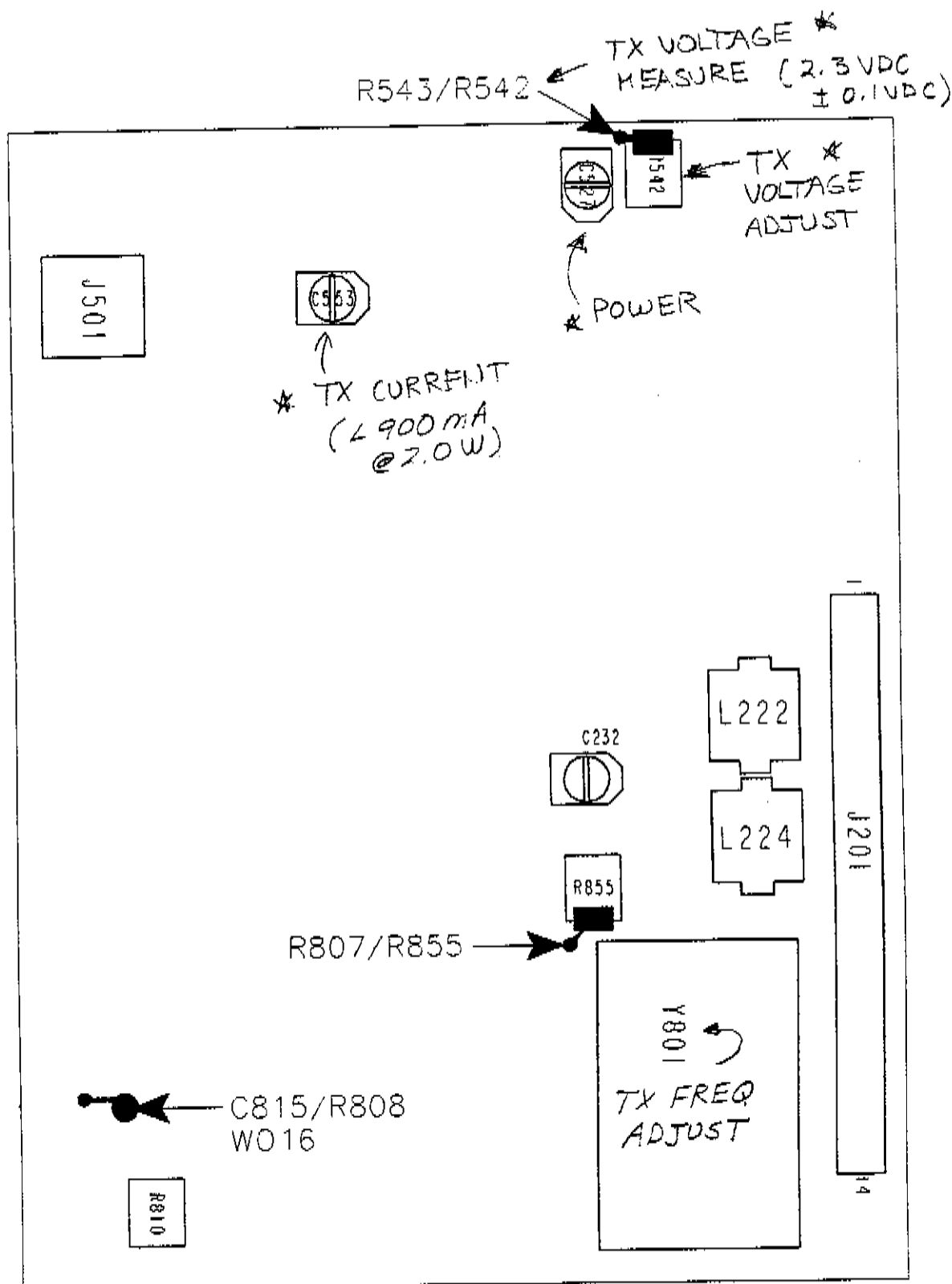


Figure 6-3 ALIGNMENT POINTS DIAGRAM

SECTION 7 PARTS LIST

SYMBOL NUMBER	DESCRIPTION	PART NUMBER	SYMBOL NUMBER	DESCRIPTION	P/ NUM
HIGH-SPEC DATA TRANSCEIVER					
PART NO. 242-3474-XX0					
A 801	VCO 403-419 MHz	023-3474-240	C 206	68 pF $\pm 5\%$ NPO 0603	510-3674-
A 801	VCO 419-435 MHz	023-3474-340	C 207	68 pF $\pm 5\%$ NPO 0603	510-3674-
A 801	VCO 435-451 MHz	023-3474-440	C 208	68 pF $\pm 5\%$ NPO 0603	510-3674-
A 801	VCO 450-466 MHz	023-3474-540	C 209	220 pF $\pm 5\%$ NPO 0603	510-3674-
A 801	VCO 464-480 MHz	023-3474-640	C 210	4.7 pF $\pm 0.1\%$ NPO 0603	510-3673-
A 801	VCO 480-496 MHz	023-3474-740		(403-435 MHz)	
A 801	VCO 496-512 MHz	023-3474-840		3.6 pF $\pm 0.1\%$ NPO 0603	510-3673-
				(435-480 MHz)	
				3 pF $\pm 0.1\%$ NPO 0603	510-3673-
				(480-512 MHz)	
C 101	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 222	.01 μ F $\pm 5\%$ X7R 0603 chip	510-3675
C 102	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 223	3.9 pF $\pm 0.1\%$ NPO 0603	510-3673
C 103	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 224	4.7 pF $\pm 0.1\%$ NPO 0603	510-3673
C 104	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 225	.01 μ F $\pm 10\%$ X7R 0603	510-3675
C 105	68 pF $\pm 5\%$ NPO 0603	510-3674-680		(12.5 kHz BW)	
C 106	68 pF $\pm 5\%$ NPO 0603	510-3674-680		39 pF $\pm 5\%$ NPO 0603	510-3674
C 107	68 pF $\pm 5\%$ NPO 0603	510-3674-680		(20-25 kHz BW)	
C 108	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 226	.01 μ F $\pm 10\%$ X7R 0603	510-3675
C 109	68 pF $\pm 5\%$ NPO 0603	510-3674-680		8.2 pF $\pm 0.1\%$ NPO 0603	510-3673
C 110	68 pF $\pm 5\%$ NPO 0603	510-3674-680		(12.5 kHz BW)	
C 111	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 227	12 pF $\pm 5\%$ NPO 0603	510-3674
C 112	68 pF $\pm 5\%$ NPO 0603	510-3674-680		(20-25 kHz BW)	
C 113	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 228	.01 μ F $\pm 10\%$ X7R 0603	510-3675
C 114	1 μ F 16V SMD tantalum	510-2625-109	C 229	.01 μ F $\pm 10\%$ X7R 0603	510-3675
C 115	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 230	.01 μ F $\pm 10\%$ X7R 0603	510-3675
C 116	.01 μ F $\pm 10\%$ X7R 0603	510-3675-103	C 232	1.5-5 pF ceramic SMD	512-1602
C 117	1 μ F 16V SMD tantalum	510-2625-109	C 233	.01 μ F $\pm 10\%$ X7R 0603	510-3675
C 118	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 234	.01 μ F $\pm 10\%$ X7R 0603	510-3675
C 123	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 235	68 pF $\pm 5\%$ NPO 0603	510-3674
C 124	1 μ F 16V SMD tantalum	510-2625-109	C 241	.01 μ F $\pm 10\%$ X7R 0603	510-3675
C 125	1 μ F 16V SMD tantalum	510-2625-109	C 242	.1 μ F $\pm 5\%$ X7R 1206	510-3609
C 126	.01 μ F $\pm 10\%$ X7R 0603	510-3675-103	C 243	.1 μ F $\pm 5\%$ X7R 1206	510-3609
			C 245	.01 μ F $\pm 10\%$ X7R 0603	510-3675
			C 246	1 μ F 16V SMD tantalum	510-2625
C 201	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 247	.01 μ F $\pm 10\%$ X7R 0603	510-3675
C 202	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 248	.01 μ F $\pm 10\%$ X7R 0603	510-3675
C 203	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 261	27 pF $\pm 5\%$ NPO 0603	510-3674
C 204	8.2 pF $\pm 0.1\%$ NPO 0603	510-3673-829	C 262	68 pF $\pm 5\%$ NPO 0603	510-3674
	(403-419 MHz)		C 263	.1 μ F $\pm 5\%$ X7R 1206	510-3609
	6.2 pF $\pm 0.1\%$ NPO 0603	510-3673-629	C 301	68 pF $\pm 5\%$ NPO 0603	510-3674
	(435-480 MHz)		C 302	10 pF $\pm 0.1\%$ NPO 0603	510-3674
	5.6 pF $\pm 0.1\%$ NPO 0603	510-3673-569		(403-435 MHz)	
	(480-512 MHz)			8.2 pF $\pm 0.1\%$ NPO 0603	510-3674
C 205	20 pF $\pm 5\%$ NPO 0603	510-3674-200		(435-466 MHz)	

SYMBOL NUMBER	DESCRIPTION	PART NUMBER	SYMBOL NUMBER	DESCRIPTION	PART NUMBER
	6.8 pF $\pm 0.1\%$ NPO 0603 (464-496 MHz)	510-3673-689		2.2 pF $\pm 0.1\%$ NPO 0603 (480-496 MHz)	510-3673-229
C 302	6.2 pF $\pm 0.1\%$ NPO 0603 (496-512 MHz)	510-3673-689		1 pF $\pm 0.1\%$ NPO 0603 (496-512 MHz)	510-3673-100
C 302	4.7 pF $\pm 0.1\%$ NPO 0603	510-3673-479	C 520	22 pF $\pm 5\%$ NPO 0603	510-3674-220
C 303	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 521	68 pF $\pm 5\%$ NPO 0603	510-3674-680
C 304	4.7 pF $\pm 0.1\%$ NPO 0603 (403-435 MHz)	510-3673-479	C 522	.01 μ F $\pm 10\%$ X7R 0603	510-3675-103
	3.3 pF $\pm 0.1\%$ NPO 0603 (435-496 MHz)	510-3673-339	C 523	68 pF $\pm 5\%$ NPO 0603	510-3674-680
	3.3 pF $\pm 0.1\%$ NPO 0603 (496-512 MHz)	510-3673-339	C 524	470 pF $\pm 5\%$ NPO 0603	510-3674-471
C 305	.01 μ F $\pm 10\%$ X7R 0603	510-3675-103	C 525	27 pF $\pm 5\%$ NPO 0603	510-3674-270
C 306	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 526	22 pF $\pm 5\%$ NPO 0603 (403-419 MHz)	510-3674-220
C 309	1 μ F 16V SMD tantalum	510-2625-109		18 pF $\pm 0.1\%$ NPO 0603 (419-435 MHz)	510-3673-180
C 401	.01 μ F $\pm 10\%$ X7R 0603	510-3675-103		15 pF $\pm 5\%$ NPO 0603 (435-512 MHz)	510-3674-150
C 402	.01 μ F $\pm 10\%$ X7R 0603	510-3675-103	C 527	2.5-10 pF SMD ceramic	512-1602-002
C 403	.01 μ F $\pm 10\%$ X7R 0603	510-3675-103	C 541	68 pF $\pm 5\%$ NPO 0603	510-3674-680
C 404	.01 μ F $\pm 10\%$ X7R 0603	510-3675-103	C 542	.01 μ F $\pm 10\%$ X7R 0603	510-3675-103
C 405	100 pF $\pm 5\%$ NPO 0603	510-3674-101	C 543	68 pF $\pm 5\%$ NPO 0603	510-3674-680
C 406	6.8 pF $\pm 0.1\%$ NPO 0603	510-3673-689	C 544	.01 μ F $\pm 10\%$ X7R 0603	510-3675-103
C 407	100 pF $\pm 5\%$ NPO 0603	510-3674-101	C 545	68 pF $\pm 5\%$ NPO 0603	510-3674-680
C 408	.01 μ F $\pm 10\%$ X7R 0603	510-3675-103	C 546	68 pF $\pm 5\%$ NPO 0603	510-3674-680
C 410	.1 μ F $\pm 5\%$ X7R 1206	510-3609-104	C 547	68 pF $\pm 5\%$ NPO 0603	510-3674-680
C 501	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 548	1 μ F 16V SMD tantalum	510-2625-109
C 502	7.5 pF $\pm 0.1\%$ NPO 0603 (435-451 MHz)	510-3673-759	C 549	.01 μ F $\pm 10\%$ X7R 0603	510-3675-103
	6.8 pF $\pm 0.1\%$ NPO 0603 (450-480 MHz)	510-3673-689	C 550	36 pF $\pm 5\%$ NPO 0805 (403-451 MHz)	510-3601-360
C 503	68 pF $\pm 5\%$ NPO 0603	510-3674-680		30 pF $\pm 5\%$ NPO 0805 (450-466 MHz)	510-3601-300
C 504	470 pF $\pm 5\%$ NPO 0603	510-3674-471		27 pF $\pm 5\%$ NPO 0805 (464-480 MHz)	510-3601-270
C 505	.01 μ F $\pm 10\%$ X7R 0603	510-3675-103		20 pF $\pm 5\%$ NPO 0805 (480-496 MHz)	510-3601-200
C 506	68 pF $\pm 5\%$ NPO 0603	510-3674-680		18 pF $\pm 5\%$ NPO 0805 (496-512 MHz)	510-3601-180
C 507	68 pF $\pm 5\%$ NPO 0603	510-3674-680		33 pF $\pm 5\%$ NPO 0805 (403-419 MHz)	510-3601-330
C 508	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 551	27 pF $\pm 5\%$ NPO 0805 (419-435 MHz)	510-3601-270
C 509	68 pF $\pm 5\%$ NPO 0603	510-3674-680		24 pF $\pm 5\%$ NPO 0805 (435-451 MHz)	510-3601-240
C 510	120 pF $\pm 5\%$ NPO 0603	510-3674-121		18 pF $\pm 5\%$ NPO 0805 (450-480 MHz)	510-3601-180
C 511	6.8 pF $\pm 0.1\%$ NPO 0603 (403-419 MHz)	510-3673-689		16 pF $\pm 5\%$ NPO 0805 (480-496 MHz)	510-3601-160
	5.6 pF $\pm 0.1\%$ NPO 0603 (419-435 MHz)	510-3673-569		15 pF $\pm 5\%$ NPO 0805 (496-512 MHz)	510-3601-150
	5.1 pF $\pm 0.1\%$ NPO 0603 (435-451 MHz)	510-3673-519			
	3.9 pF $\pm 0.1\%$ NPO 0603 (450-480 MHz)	510-3673-399			

SYMBOL NUMBER	DESCRIPTION	PART NUMBER	SYMBOL NUMBER	DESCRIPTION	PA NUM
C 552	3.9 pF $\pm 5\%$ NPO 0805	510-3601-399	C 564	.01 μ F $\pm 10\%$ X7R 0603	510-3675-
C 553	2.5-10 pF ceramic SMD	512-1602-002	C 565	68 pF $\pm 5\%$ NPO 0603	510-3674-
C 554	68 pF $\pm 5\%$ NPO 0603	510-3674-680	C 567	10 pF $\pm 5\%$ NPO 0805	510-3601-
C 555	33 pF $\pm 5\%$ NPO 0603 (403-480 MHz)	510-3674-330		7.5 pF $\pm 5\%$ NPO 0805	510-3601-
C 555	39 pF $\pm 5\%$ NPO 0603 (480-512 MHz)	510-3674-390	C 567	(419-435 MHz) 5.6 pF $\pm 5\%$ NPO 0805	510-3601-
C 560	22 pF $\pm 5\%$ NPO 0603	510-3674-220		(435-466 MHz) 5.1 pF $\pm 5\%$ NPO 0805	510-3601-
C 561	7.5 pF $\pm 5\%$ NPO 0805 (403-419 MHz)	510-3601-759		(464-496 MHz) 4.3 pF $\pm 5\%$ NPO 0805	510-3601-
	6.2 pF $\pm 5\%$ NPO 0805 (419-435 MHz)	510-3601-629		(496-512 MHz) 47 pF $\pm 5\%$ NPO 0603	510-3674
	5.6 pF $\pm 5\%$ NPO 0805 (435-451 MHz)	510-3601-569	C 569	9.1 pF $\pm 5\%$ NPO 0805	510-3601-
	5.1 pF $\pm 5\%$ NPO 0805 (450-466 MHz)	510-3601-519		(403-419 MHz) 6.8 pF $\pm 5\%$ NPO 0805	510-3601-
	4.7 pF $\pm 5\%$ NPO 0805 (464-480 MHz)	510-3601-479		(419-435 MHz) 5.6 pF $\pm 5\%$ NPO 0805	510-3601-
	4.3 pF $\pm 5\%$ NPO 0805 (480-496 MHz)	510-3601-439		(435-451 MHz) 5.1 pF $\pm 5\%$ NPO 0805	510-3601-
	3.9 pF $\pm 5\%$ NPO 0805 (496-512 MHz)	510-3601-399		(451-466 MHz) 4.7 pF $\pm 5\%$ NPO 0805	510-3601-
C 562	8.2 pF $\pm 5\%$ NPO 0805 (403-419 MHz)	510-3601-829	C 570	(464-512 MHz) 33 pF $\pm 5\%$ NPO 0603	510-3674
	7.5 pF $\pm 5\%$ NPO 0805 (419-435 MHz)	510-3601-759			
	6.8 pF $\pm 5\%$ NPO 0805 (435-451 MHz)	510-3601-689	C 801	.01 μ F $\pm 10\%$ X7R 0603	510-3675
	6.2 pF $\pm 5\%$ NPO 0805 (450-480 MHz)	510-3601-629	C 802	.01 μ F $\pm 10\%$ X7R 0603	510-3675
	5.6 pF $\pm 5\%$ NPO 0805 (480-496 MHz)	510-3601-569	C 803	.01 μ F $\pm 10\%$ X7R 0603	510-3675
	5.1 pF $\pm 5\%$ NPO 0805 (496-512 MHz)	510-3601-519	C 804	3.3 pF $\pm 0.1\%$ NPO 0603	510-3675
C 563	11 pF $\pm 5\%$ NPO 0805 (403-419 MHz)	510-3601-110	C 805	.01 μ F $\pm 10\%$ X7R 0603	510-3675
	10 pF $\pm 5\%$ NPO 0805 (403-419 MHz)	510-3601-100	C 806	68 pF $\pm 5\%$ NPO 0603	510-3674
	8.2 pF $\pm 5\%$ NPO 0805 (435-451 MHz)	510-3601-829	C 807	.01 μ F $\pm 10\%$ X7R 0603	510-3675
	7.5 pF $\pm 5\%$ NPO 0805 (450-466 MHz)	510-3601-759	C 808	68 pF $\pm 5\%$ NPO 0603	510-3674
	6.8 pF $\pm 5\%$ NPO 0805 (464-480 MHz)	510-3601-689	C 809	100 pF $\pm 5\%$ NPO 0805	510-3601-
	6.2 pF $\pm 5\%$ NPO 0805 (480-496 MHz)	510-3601-629	C 810	.1 μ F $\pm 5\%$ X7R 1206	510-3601-
	5.6 pF $\pm 5\%$ NPO 0805 (496-512 MHz)	510-3601-569	C 811	.001 μ F $\pm 10\%$ X7R 0603	510-3675
			C 812	.0047 μ F $\pm 10\%$ X7R 0805	510-3601-
			C 813	.001 μ F $\pm 10\%$ X7R 0603	510-3675
			C 814	1 μ F 16V SMD tantalum	510-262
			C 815	.0047 μ F $\pm 10\%$ X7R 0805	510-3601-
			C 817	68 pF $\pm 5\%$ NPO 0603	510-3675
			C 818	1 μ F 16V SMD tantalum	510-262
			C 819	3.9 pF $\pm 0.1\%$ NPO 0603	510-3675
			C 831	.01 μ F $\pm 10\%$ X7R 0603	510-3675
			C 832	.01 μ F $\pm 10\%$ X7R 0603	510-3675
			C 833	68 pF $\pm 5\%$ NPO 0603	510-3675
			C 834	4.7 μ F 10V SMD tantalum	510-262

SYMBOL NUMBER	DESCRIPTION	PART NUMBER	SYMBOL NUMBER	DESCRIPTION	PART NUMBER
C 835	.01 μ F $\pm$ 10% X7R 0603	510-3675-103	EP541	Ferrite bead SMD	517-2503-001
C 836	.01 μ F $\pm$ 10% X7R 0603	510-3675-103			
C 837	.01 μ F $\pm$ 10% X7R 0603	510-3675-103			
C 838	68 pF $\pm$ 5% NPO 0603	510-3674-680	J 201	14-pin single row receptacle	515-7110-214
C 839	.01 μ F $\pm$ 10% X7R 0603	510-3675-103	J 501	Straight terminal PC bd mt	515-3013-030
C 840	68 pF $\pm$ 5% NPO 0603	510-3674-680			
C 841	.01 μ F $\pm$ 10% X7R 0603	510-3675-103	L 201	Inductor LL2012 F15N	542-9003-157
C 842	.01 μ F $\pm$ 10% X7R 0603	510-3675-103	L 202	10 nH $\pm$ 10% SMD NHY0805	542-9003-107
C 844	1 μ F 16V SMD tantalum	510-2625-109	L 222	1 μ H $\pm$ 6%5mm variable	542-1012-015
C 845	.01 μ F $\pm$ 10% X7R 0603	510-3675-103	L 201	15 nH $\pm$ 10% SMD 0805	542-9003-157
C 846	68 pF $\pm$ 5% NPO 0603	510-3674-680		(403-466 MHz)	
C 847	.01 μ F $\pm$ 10% X7R 0603	510-3675-103		12 nH $\pm$ 10% SMD 0805	542-9003-127
C 848	68 pF $\pm$ 5% NPO 0603	510-3674-680		(464-512 MHz)	
C 849	68 pF $\pm$ 5% NPO 0603	510-3674-680	L 202	12 nH $\pm$ 10% SMD 0805	542-9003-127
C 850	68 pF $\pm$ 5% NPO 0603	510-3674-680	L 223	.82 μ H SMD inductor	542-9001-828
C 851	68 pF $\pm$ 5% NPO 0603	510-3674-680	L 224	1 μ H $\pm$ 6%5mm variable	542-1012-015
C 852	68 pF $\pm$ 5% NPO 0603	510-3674-680	L 242	680 μ H quad coil	542-5102-001
C 853	1 μ F 16V SMD tantalum	510-2625-109			
C 855	68 pF $\pm$ 5% NPO 0603	510-3674-680	L 301	Inductor LL2012 F12N	542-9003-127
				(403-435 MHz)	
C 901	.01 μ F $\pm$ 10% X7R 0603	510-3675-103	L 301	Inductor LL2012 F10N	542-9003-107
C 902	27 pF $\pm$ 5% NPO 0603	510-3674-270		(435-512 MHz)	
C 903	.01 μ F $\pm$ 10% X7R 0603	510-3675-103	L 302	Inductor LL2012 F15N	542-9003-157
C 904	220 pF $\pm$ 5% NPO 0805	510-3601-221			
C 905	270 pF $\pm$ 5% NPO 0805	510-3601-271	L 401	82 nH $\pm$ 10% SMD 0805	542-9003-827
C 906	.01 μ F $\pm$ 10% X7R 0603	510-3675-103	L 402	82 nH $\pm$ 10% SMD 0805	542-9003-827
C 907	.01 μ F $\pm$ 10% X7R 0603	510-3675-103	L 404	1 μ H SMD inductor	542-9001-109
C 908	.01 μ F $\pm$ 10% X7R 0603	510-3675-103			
C 909	1 μ F 16V SMD tantalum	510-2625-109	L 501	18 nH inductor LL2012 F15N	542-9003-187
C 910	.01 μ F $\pm$ 10% X7R 0603	510-3675-103		(435-451 MHz)	
C 911	68 pF $\pm$ 5% NPO 0603	510-3674-680		15 nH inductor LL2012 F15N	542-9003-157
				(450-480 MHz)	
CR201	Switching diode SOT-23	523-1504-002	L 502	1 μ H SMD inductor	542-9001-109
			L 503	15 nH inductor LL2012 F15N	542-9003-157
CR561	Pin switch diode SOT-23	523-1504-001		(403-496 MHz)	
CR562	Pin switch diode SOT-23	523-1504-001		12 nH inductor LL2012 F12N	542-9003-127
				(496-512 MHz)	
CR831	Dual switch diode SOT-23	523-1504-023	L 521	43 nH 10-turn SMD air core	542-0030-010
			L 522	3.9 nH inductor LL2012 F3N9	542-9003-396
CR901	Dual switch diode SOT-23	523-1504-023		(403-419 MHz)	
CR902	Dual switch diode SOT-23	523-1504-023		3.3 nH inductor LL2012 F3N3	542-9003-336
				(419-466 MHz)	
EP200	Mini cer crystal pin insulator	010-0345-280		2.7 nH inductor LL2012 F2N7	542-9003-276
				(464-496 MHz)	
EP501	Ferrite bead SMD	517-2503-001		2.2 nH inductor LL2012 F2N2	542-9003-226
				(496-512 MHz)	

SYMBOL NUMBER	DESCRIPTION	PART NUMBER	SYMBOL NUMBER	DESCRIPTION	P/ NUM
L 541	18.5 nH 5-turn SMD air core	542-0030-005	R 120	100k ohm $\pm 5\%$.063W 0603	569-0155-
L 561	18.5 nH 5-turn SMD air core	542-0030-005	R 121	330k ohm $\pm 5\%$.063W 0603	569-0155-
L 562	35.5 nH 9-turn SMD air core	542-0030-009			
L 563	35.5 nH 9-turn SMD air core	542-0030-009	R 201	82 ohm $\pm 5\%$.063W 0603	569-0155-
L 564	18.5 nH 5-turn SMD air core	542-0030-005	R 202	16k ohm $\pm 5\%$.063W 0603	569-0155-
L 565	1 μ H SMD inductor	542-9001-109	R 203	3.9k ohm $\pm 5\%$.063W 0603	569-0155-
L 566	12.5 nH SMD air core	542-0030-004	R 204	180 ohm $\pm 5\%$.063W 0603	569-0155-
			R 222	330 ohm $\pm 5\%$.063W 0603	569-0155-
L 801	39 μ H $\pm 10\%$ SMD NHY0805	542-9003-397	R 223	22k ohm $\pm 5\%$.063W 0603	569-0155-
L 851	1 μ H SMD inductor	542-9001-109	R 224	1k ohm $\pm 5\%$.063W 0603	569-0155-
L 901	.68 μ H SMD inductor	542-9001-688	R 225	15k ohm $\pm 5\%$.063W 0603	569-0155-
MP801	VCO can	017-2225-751	R 226	470 ohm $\pm 5\%$.063W 0603	569-0155-
MP802	Top shield, transmitter	017-2225-761	R 227	270 ohm $\pm 5\%$.063W 0603	569-0155-
MP803	Bottom shield, transmitter	017-2225-762	R 228	100 ohm $\pm 5\%$.063W 0603	569-0155-
MP804	Bottom shield	017-2225-763	R 229	330 ohm $\pm 5\%$.063W 0603	569-0155-
MP805	Bottom shield	017-2225-764	R 230	2.7k ohm $\pm 5\%$.063W 0603	569-0155-
MP806	Crystal filter shield	017-2225-699		(12.5 kHz BW)	
				1.8k ohm $\pm 5\%$.063W 0603	569-0155-
				(20-25 kHz BW)	
PC001	PC board	035-3474-030	R 241	56k ohm $\pm 5\%$.063W 0603	569-0155-
			R 242	27k ohm $\pm 5\%$.063W 0603	569-0155-
			R 243	270 ohm $\pm 5\%$.063W 0603	569-0155-
Q 101	NPN amplifier SOT-23	576-0003-616	R 261	200k ohm $\pm 5\%$.063W 0603	569-0155-
Q 102	PNP digital w/res SOT-23	576-0003-621		(12.5 kHz BW)	
Q 103	NPN amplifier SOT-23	576-0003-616		120k ohm $\pm 5\%$.063W 0603	569-0155-
				(20 kHz BW)	
Q 201	NPN low noise SOT-23	576-0003-636		100k ohm $\pm 5\%$.063W 0603	569-0155-
Q 221	VHF/UHF amp SOT-23	576-0003-634		(25 kHz BW)	
Q 222	Si N-chnl JFET SOT	576-0006-019	R 262	100k ohm $\pm 5\%$.063W 0603	569-0155-
			R 263	10k ohm $\pm 5\%$.063W 0603	569-0155-
Q 301	NPN low noise SOT-23	576-0003-636	R 264	18k ohm $\pm 5\%$.063W 0603	569-0155-
			R 265	10 ohm $\pm 5\%$.063W 0603	569-0155-
Q 401	VHF/UHF amp SOT-23	576-0003-634			
			R 301	3.3k ohm $\pm 5\%$.063W 0603	569-0155-
Q 501	NPN low noise SOT-23	576-0003-636	R 302	1.8k ohm $\pm 5\%$.063W 0603	569-0155-
Q 521	NPN 2-2 GHz SO-8	576-0003-604	R 303	180 ohm $\pm 5\%$.063W 0603	569-0155-
Q 541	RF FET	576-0006-450	R 304	1k ohm $\pm 5\%$.063W 0603	569-0155-
Q 831	NPN amplifier SOT-23	576-0003-616	R 401	10 ohm $\pm 5\%$.063W 0603	569-0155-
Q 832	Si NPN gen purp sw/amp	576-0001-300	R 402	15k ohm $\pm 5\%$.063W 0603	569-0155-
Q 833	VHF/UHF amp SOT-23	576-0003-634	R 403	2.7k ohm $\pm 5\%$.063W 0603	569-0155-
Q 834	PNP digital w/res SOT-23	576-0003-621	R 404	330 ohm $\pm 5\%$.063W 0603	569-0155-
Q 851	Bi-polar MMIC SOT-143	576-0003-638			
			R 501	2.2k ohm $\pm 5\%$.063W 0603	569-0155-
Q 901	VHF/UHF amp SOT-23	576-0003-634	R 502	2.2k ohm $\pm 5\%$.063W 0603	569-0155-
			R 503	10 ohm $\pm 5\%$.063W 0603	569-0155-
			R 504	560 ohm $\pm 5\%$.063W 0603	569-0155-

PARTS LIST

SYMBOL NUMBER	DESCRIPTION	PART NUMBER	SYMBOL NUMBER	DESCRIPTION	PART NUMBER
R 506	100 ohm $\pm 5\%$.063W 0603	569-0155-101	R 852	18 ohm $\pm 5\%$.063W 0603 (403-435 MHz)	569-0155-180
R 521	1k ohm $\pm 5\%$.063W 0603	569-0155-102		39 ohm $\pm 5\%$.063W 0603 (435-480 MHz)	569-0155-390
R 522	150 ohm $\pm 5\%$.063W 0603	569-0155-151		18 ohm $\pm 5\%$.063W 0603 (480-512 MHz)	569-0155-180
R 524	220 ohm $\pm 5\%$.063W 0603	569-0155-221		270 ohm $\pm 5\%$.063W 0603 (403-435 MHz)	569-0155-271
R 541	220k ohm $\pm 5\%$.063W 0603	569-0155-224	R 853	150 ohm $\pm 5\%$.063W 0603 (435-480 MHz)	569-0155-151
R 542	1M ohm SMD trimmer	562-0130-105		270 ohm $\pm 5\%$.063W 0603 (480-512 MHz)	569-0155-271
R 543	10k ohm $\pm 5\%$.063W 0603	569-0155-103	R 854	82 ohm $\pm 5\%$.063W 0603	569-0155-820
R 546	47 ohm $\pm 5\%$.063W 0603	569-0155-470	R 855	100k ohm SMD trimmer	562-0130-104
R 547	100k ohm $\pm 5\%$.063W 0603	569-0155-104	R 856	4.7k ohm $\pm 5\%$.063W 0603	569-0155-472
R 548	330k ohm $\pm 5\%$.063W 0603	569-0155-334	R 857	4.7k ohm $\pm 5\%$.063W 0603	569-0155-472
R 549	560k ohm $\pm 5\%$.063W 0603	569-0155-564	R 858	4.7k ohm $\pm 5\%$.063W 0603	569-0155-472
R 562	620 ohm $\pm 5\%$.063W 0603	569-0155-621	R 860	100 ohm $\pm 5\%$.063W 0603	569-0155-101
R 563	620 ohm $\pm 5\%$.063W 0603	569-0155-621	R 901	22k ohm $\pm 5\%$.063W 0603	569-0155-223
R 564	47k ohm $\pm 5\%$.063W 0603	569-0155-473	R 902	15k ohm $\pm 5\%$.063W 0603	569-0155-153
R 801	10k ohm $\pm 5\%$.063W 0603	569-0155-103	R 903	100 ohm $\pm 5\%$.063W 0603	569-0155-101
R 802	10k ohm $\pm 5\%$.063W 0603	569-0155-103	R 904	330 ohm $\pm 5\%$.063W 0603	569-0155-331
R 804	10 ohm $\pm 5\%$.063W 0603	569-0155-100	R 905	220 ohm $\pm 5\%$.063W 0603	569-0155-221
R 805	27k ohm $\pm 5\%$.063W 0603	569-0155-273	R 906	10 ohm $\pm 5\%$.063W 0603	569-0155-100
R 806	12k ohm $\pm 5\%$.063W 0603	569-0155-123	R 907	2.2k ohm $\pm 5\%$.063W 0603	569-0155-222
R 807	4.7k ohm $\pm 5\%$.063W 0603	569-0155-472			
R 808	18k ohm $\pm 5\%$.063W 0603	569-0155-183	U 101	5.5V regulator SO-6	544-2603-086
R 810	220k ohm SMD trimmer	562-0130-224	U 122	+5V regulator micropower SO	544-2003-067
R 811	27k ohm $\pm 5\%$.063W 0603 (435-451 MHz)	569-0155-273			
	18k ohm $\pm 5\%$.063W 0603 (450-466 MHz)	569-0155-183	U 221	Double balanced mixer	544-0007-014
	27k ohm $\pm 5\%$.063W 0603 (435-451 MHz)	569-0155-273	U 241	FM IF MC3371D SO-16	544-2002-031
R 812	10k ohm $\pm 5\%$.063W 0603	569-0155-103	U 261	Single op amp SOT-23-5	544-2016-001
R 813	100k ohm $\pm 5\%$.063W 0603	569-0155-104			
R 831	10k ohm $\pm 5\%$.063W 0603	569-0155-103	U 542	Single op amp SOT23-5	544-2016-001
R 834	10k ohm $\pm 5\%$.063W 0603	569-0155-103			
R 835	1.5k ohm $\pm 5\%$.063W 0603	569-0155-152	U 801	Fractional-N synthesizer	544-3954-027
R 836	10k ohm $\pm 5\%$.063W 0603	569-0155-103			
R 838	100 ohm $\pm 5\%$.063W 0603	569-0155-101	Y 801	17.5 MHz TCXO ± 1.5 PPM	518-7009-521
R 839	680 ohm $\pm 5\%$.063W 0603	569-0155-681			
R 840	22k ohm $\pm 5\%$.063W 0603	569-0155-223	Z 201	443 MHz helical filter SMD (435-451 MHz)	532-1005-042
R 841	15k ohm $\pm 5\%$.063W 0603	569-0155-153	Z 201	459 MHz helical filter SMD (450-466 MHz)	532-1005-044
R 842	470 ohm $\pm 5\%$.063W 0603	569-0155-471	Z 201	472 MHz helical filter SMD (464-480 MHz)	532-1005-045
R 843	10 ohm $\pm 5\%$.063W 0603	569-0155-100			
R 844	680 ohm $\pm 5\%$.063W 0603	569-0155-681			
R 851	270 ohm $\pm 5\%$.063W 0603 (403-435 MHz)	569-0155-271			
	150 ohm $\pm 5\%$.063W 0603 (435-480 MHz)	569-0155-151			
	270 ohm $\pm 5\%$.063W 0603 (480-512 MHz)	569-0155-271			

SYMBOL NUMBER	DESCRIPTION	PART NUMBER	SYMBOL NUMBER	DESCRIPTION	P NUM
Z 202	443 MHz helical filter SMD (435-451 MHz)	532-1005-042	C 854	100 pF $\pm 5\%$ NPO 0603	510-3674
			C 855	68 pF $\pm 5\%$ NPO 0603	510-3674
Z 202	459 MHz helical filter SMD (450-466 MHz)	532-1005-044	C 856	2.7 pF $\pm 0.1\%$ NPO 0603	510-3673
			C 858	68 pF $\pm 5\%$ NPO 0603	510-3674
Z 202	472 MHz helical filter SMD (464-480 MHz)	532-1005-045	C 859	8.2 pF $\pm 0.1\%$ NPO 0603 (403-419 MHz)	510-3673
Z 221	52.95 MHz 4-pole 8 kHz BW (12.5 kHz bandwidth)	532-0009-011		7.5 pF $\pm 0.1\%$ NPO 0603 (419-466 MHz)	510-3673
Z 221	52.95 MHz 4-pole 15 kHz BW (20 kHz and 25 kHz bandwidth)	532-0009-009		6.8 pF $\pm 0.1\%$ NPO 0603 (464-480 MHz)	510-3673
Z 222	52.95 MHz 4-pole 8 kHz BW (12.5 kHz bandwidth)	532-0009-011	C 859	8.2 pF $\pm 0.1\%$ NPO 0603 (480-496 MHz)	510-3673
Z 222	52.95 MHz 4-pole 15 kHz BW (20 kHz and 25 kHz bandwidth)	532-0009-009	C 860	1 pF $\pm 0.1\%$ NPO 0603 (403-419/435-451 MHz Only)	510-3673
Z 241	450 kHz, 9 kHz BW (12.5 kHz bandwidth)	532-2004-015	C 861	8.2 pF $\pm 0.1\%$ NPO 0603 (403-435 MHz)	510-3673
Z 241	Ceramic data filter (20 kHz bandwidth)	532-2004-016		6.8 pF $\pm 0.1\%$ NPO 0603 (435-451 MHz)	510-3673
Z 241	450 kHz, 20 kHz BW (25 kHz bandwidth)	532-2004-013		8.2 pF $\pm 0.1\%$ NPO 0603 (450-461 MHz)	510-3673
Z 242	450 kHz, 9 kHz BW (12.5 kHz bandwidth)	532-2004-015		5.6 pF $\pm 0.1\%$ NPO 0603 (464-480 MHz)	510-3673
Z 242	Ceramic data filter (20 kHz bandwidth)	532-2004-016		6.8 pF $\pm 0.1\%$ NPO 0603 (480-496 MHz)	510-3673
Z 242	450 kHz, 20 kHz BW (25 kHz bandwidth)	532-2004-013	C 862	6.8 pF $\pm 0.1\%$ NPO 0603	510-3673
			C 863	100 pF $\pm 0.1\%$ NPO 0603 (403-419 MHz)	510-3673
				68 pF $\pm 5\%$ NPO 0603 (419-512 MHz)	510-3674
			C 864	10 pF $\pm 0.1\%$ NPO 0603	510-3673
			C 865	100 pF $\pm 0.1\%$ NPO 0603 (403-419 MHz)	510-3673
C 850	68 pF $\pm 5\%$ NPO 0603	510-3674-680		68 pF $\pm 5\%$ NPO 0603 (419-512 MHz)	510-3674
C 851	9.1 pF $\pm 0.1\%$ NPO 0603 (403-419 MHz)	510-3673-919		100 pF $\pm 0.1\%$ NPO 0603 (403-419 MHz)	510-3673
	8.2 pF $\pm 0.1\%$ NPO 0603 (419-466 MHz)	510-3673-829		68 pF $\pm 5\%$ NPO 0603 (419-512 MHz)	510-3674
	68 pF $\pm 5\%$ NPO 0603 (466-512 MHz)	510-3674-680		100 pF $\pm 0.1\%$ NPO 0603 (403-419 MHz)	510-3673
C 852	7.5 pF $\pm 0.1\%$ NPO 0603	510-3673-759		68 pF $\pm 5\%$ NPO 0603 (419-512 MHz)	510-3674
C 853	12 pF $\pm 5\%$ NPO 0603 (403-419 MHz)	510-3674-120	C 867	100 pF $\pm 0.1\%$ NPO 0603 (403-419 MHz)	510-3673
	10 pF $\pm 5\%$ NPO 0603 (419-451 MHz)	510-3674-120		68 pF $\pm 5\%$ NPO 0603 (419-512 MHz)	510-3674
	9.1 pF $\pm 0.1\%$ NPO 0603 (464-480 MHz)	510-3673-919	C 868	2.4 pF $\pm 0.1\%$ NPO 0603 (403-419 MHz)	510-3673
	8.2 pF $\pm 0.1\%$ NPO 0603 (435-451 MHz)	510-3673-829		2.2 pF $\pm 0.1\%$ NPO 0603 (419-435 MHz)	510-3673
	8.2 pF $\pm 0.1\%$ NPO 0603 (480-496 MHz)	510-3673-829		1.8 pF $\pm 0.1\%$ NPO 0603 (435-466 MHz)	510-3673

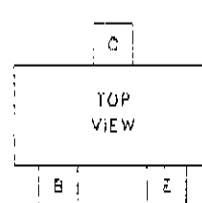
SYMBOL NUMBER	DESCRIPTION	PART NUMBER	SYMBOL NUMBER	DESCRIPTION	PART NUMBER
	1.2 pF $\pm 0.1\%$ NPO 0603 (464-480 MHz)	510-3673-129	L 855	56 nH inductor LL2012 F56N	542-9003-567
	1.8 pF $\pm 0.1\%$ NPO 0603 (480-496 MHz)	510-3673-189	L 856	27 nH $\pm 10\%$ SMD 0805 (403-435 MHz)	542-9003-277
C 870	1 pF $\pm 0.1\%$ NPO 0603	510-3673-109		22 nH $\pm 10\%$ SMD 0805 (435-480 MHz)	542-9003-227
C 871	100 pF $\pm 5\%$ NPO 0603	510-3674-101		18 nH $\pm 10\%$ SMD 0805 (480-512 MHz)	542-9003-187
C 873	100 pF $\pm 5\%$ NPO 0603	510-3674-101			
C 874	3.3 pF $\pm 0.1\%$ NPO 0603 (403-419 MHz)	510-3673-339	L 861	12 nH inductor LL2012 F12N (435-480 MHz)	542-9003-127
C 874	3.3 pF $\pm 0.1\%$ NPO 0603 (419-435 MHz)	510-3673-339		15 nH inductor LL2012 F12N (480-512 MHz)	542-9003-157
	3.3 pF $\pm 0.1\%$ NPO 0603 (435-496 MHz)	510-3673-339			
C 876	10 pF $\pm 0.1\%$ NPO 0603 (403-419 MHz)	510-3673-100	Q 850	NPN transistor NE85619	576-0003-651
	9.1 pF $\pm 0.1\%$ NPO 0603 (419-435 MHz)	510-3673-919	Q 851	NPN transistor NE85619	576-0003-651
	8.2 pF $\pm 0.1\%$ NPO 0603 (435-496 MHz)	510-3673-829	Q 852	NPN transistor NE85619	576-0003-651
C 877	1.2 pF $\pm 0.1\%$ NPO 0603 (403-435 MHz)	510-3673-129	Q 853	NPN transistor NE85619	576-0003-651
	1 pF $\pm 0.1\%$ NPO 0603 (435-496 MHz)	510-3673-109			
C 878	10 pF $\pm 0.1\%$ NPO 0603 (403-435 MHz Only)	510-3673-100	R 851	10k ohm $\pm 5\%$.063W 0603	569-0155-103
CR850	Pin switch diode SOT-23	523-1504-001	R 852	47k ohm $\pm 5\%$.063W 0603	569-0155-473
CR851	Varactor SOD-323 BB535	523-5005-022	R 853	47k ohm $\pm 5\%$.063W 0603	569-0155-473
CR852	Varactor diode SOD-123	523-5005-020	R 854	10 ohm $\pm 5\%$.063W 0603	569-0155-100
CR853	Varactor diode SOD-123	523-5005-020	R 856	10 ohm $\pm 5\%$.063W 0603	569-0155-100
CR854	Varactor SOD-323 BB535	523-5005-022	R 857	6.8k ohm $\pm 5\%$.063W 0603	569-0155-682
CR855	Varactor SOD-323 BB535	523-5005-022	R 858	1k ohm $\pm 5\%$.063W 0603	569-0155-102
CR856	Varactor SOD-323 BB535	523-5005-022	R 862	10k ohm $\pm 5\%$.063W 0603	569-0155-103
			R 863	10 ohm $\pm 5\%$.063W 0603	569-0155-100
L 851	82 nH $\pm 10\%$ SMD 0805	542-9003-827	R 864	10k ohm $\pm 5\%$.063W 0603	569-0155-103
L 852	82 nH $\pm 10\%$ SMD 0805 (435-466 MHz)	542-9003-827	R 865	10k ohm $\pm 5\%$.063W 0603	569-0155-103
	150 nH $\pm 10\%$ SMD 0805 (464-480 MHz)	542-9003-158	R 866	470 ohm $\pm 5\%$.063W 0603	569-0155-471
L 853	22 nH $\pm 10\%$ SMD 0805 (403-480 MHz)	542-9003-227	R 867	12k ohm $\pm 5\%$.063W 0603	569-0155-123
	18 nH $\pm 10\%$ SMD 0805 (480-512 MHz)	542-9003-187	R 868	390 ohm $\pm 5\%$.063W 0603	569-0155-391
L 854	82 nH $\pm 10\%$ SMD 0805 (435-466 MHz)	542-9003-827	R 869	270 ohm $\pm 5\%$.063W 0603	569-0155-271
	150 nH $\pm 10\%$ SMD 0805 (464-480 MHz)	542-9003-158	R 870	18 ohm $\pm 5\%$.063W 0603	569-0155-180
			R 871	3.9k ohm $\pm 5\%$.063W 0603	569-0155-392
			R 872	1.8k ohm $\pm 5\%$.063W 0603	569-0155-182
			R 874	680 ohm $\pm 5\%$.063W 0603	569-0155-681
			R 875	270 ohm $\pm 5\%$.063W 0603	569-0155-271
			Z 850	Coaxial xmit line ind 835 MHz (403-419 MHz Only)	542-9004-002
				Coaxial xmit line ind 885 MHz (419-435 MHz Only)	542-9004-003
				Coaxial xmit line ind 935 MHz (435-451 MHz Only)	542-9004-004
				Coaxial xmit line ind 985 MHz (450-466 MHz Only)	542-9004-005
				Coaxial xmit line 1035 MHz (464-480 MHz Only)	542-9004-006

SYMBOL NUMBER	DESCRIPTION	PART NUMBER
	Coaxial xmit line 1095 MHz (480-496 MHz Only)	542-9004-007
	Coaxial xmit line 1180 MHz (496-512 MHz Only)	542-9004-008

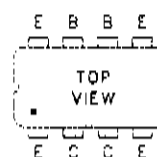
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SECTION 8 SCHEMATICS AND COMPONENT LAYOUTS

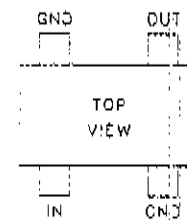
TRANSISTOR AND DIODE BASING REFERENCE TABLE		
TRANSISTORS		
Part Number	Basing Diagram	Identification
576-0001-300	1	1R
576-0003-604	2	3604
576-0003-616	1	26
576-0003-621	1	74
576-0003-634	1	3B
576-0003-636	1	R25
576-0003-638	3	-
576-0003-651	1	24
576-0006-450	4	-
DIODES		
523-1504-001	-	4D
523-1504-002	-	5A
523-1504-023	-	A7
523-5005-020	-	S
523-5005-022	-	S



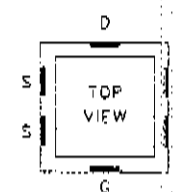
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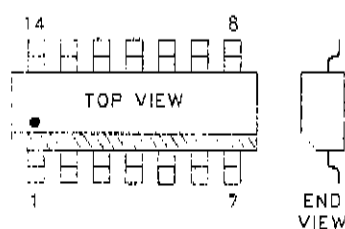
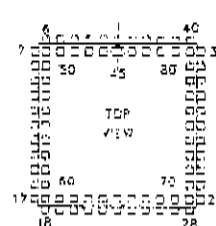
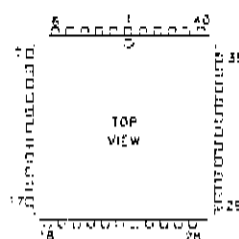
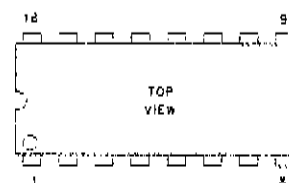


3



4

INTEGRATED CIRCUITS

END
VIEW

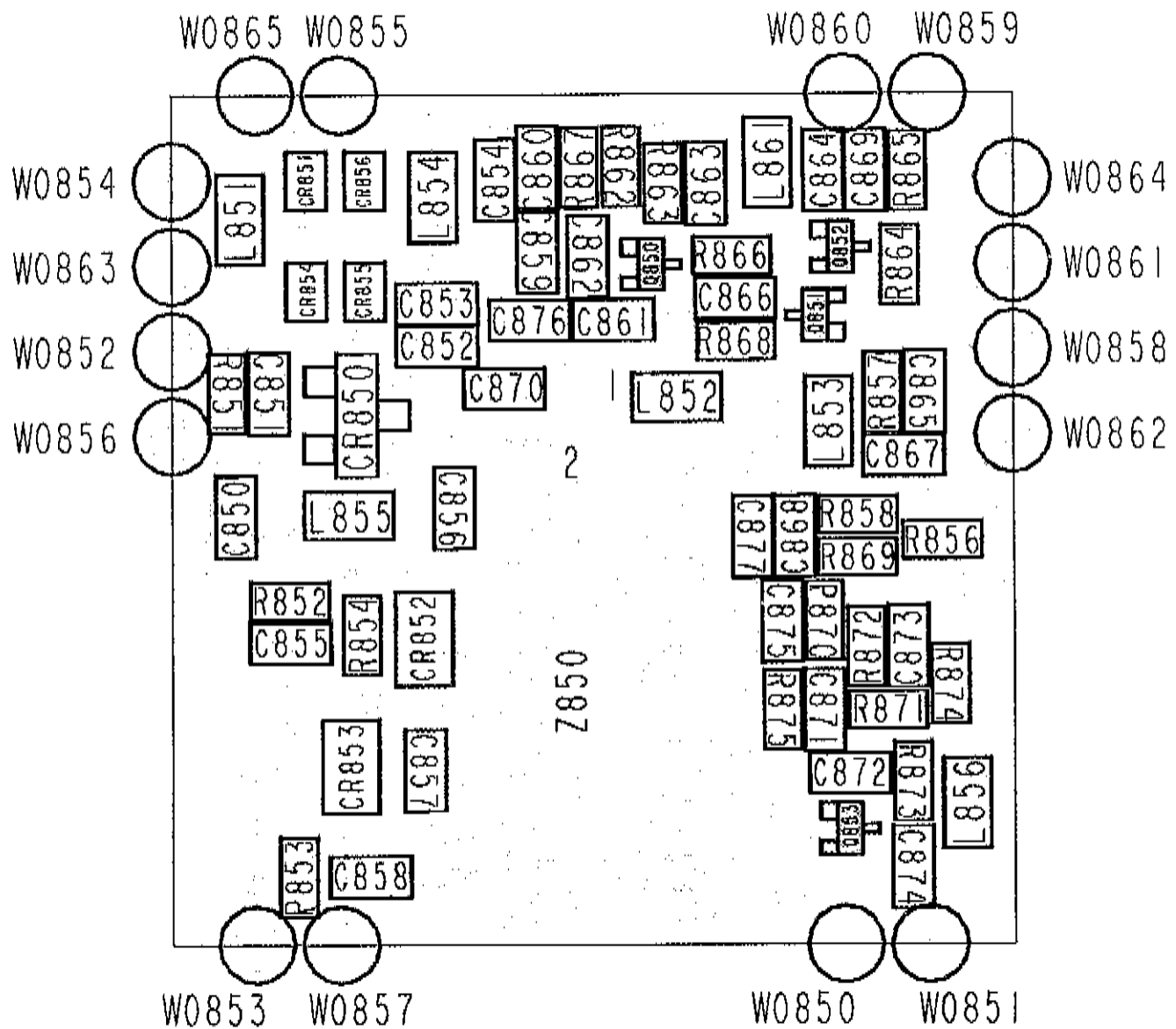


Figure 8-1 VCO COMPONENT LAYOUT (COMPONENT SIDE VIEW)