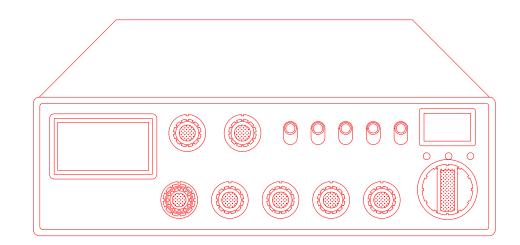




# Model DX 949 Service Manual<sup>C</sup>



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## **1.0 GENERAL**

Model
Frequency Range
Emission Modes
Frequency Control
Frequency Tolerance
Frequency Stability
Operating Temperature Range
Microphone
-

Input Voltage Current Drain : Transmit (AM full mod.) Current Drain : Receiver (Squelched) (Max. audio output)

Antenna Connector Dimensions Weight

#### **1.1 TRANSMITTER**

RF Power Output RF Transmit Modes Modulation

Spurious Emissions Carrier Suppression Audio Frequency Response Antenna Impedance Output Indicators DX 949 26.965 - 27.405MHz. AM/USB/LSB Phase Lock Loop (PLL) synthesizer.  $\pm 0.005$  %.  $\pm 0.001$  %. -30°C to +50°C. Plug-in dynamic; with push-to-talk switch and coiled cord. 13.8V DC nominal  $\pm 15\%$ . <3.5A. <0.5A. <1.0A. UHF, SO239. 2-3/8"(H) x 7-7/8"(W) x 9-1/4"(D). 5 lb.

AM : 4W SSB : 12W AM/SSB High and low level Class B, Amplitude Modulation : AM and SSB -55 dB. -55 dB. 300 to 2500Hz 50 Ohms. Meter shows relative RF output power, SWR and AM Modulation. Transmit LED glows red when transmitter is in operation.

#### **1.2 RECEIVER**

Sensitivity For 10dB S/N (AM) Sensitivity For 10dB S/N (SSB) IF Frequency Image Rejection Adjacent Channel Selectivity RF Gain Control Automatic Gain Control (AGC) Figure Of Merit Squelch Noise Blanker Audio Output Power Audio Frequency Response Built-in Speaker External Speaker (Not Supplied) <0.5μV <0.25μV. AM : 10.695 MHz 1st IF, 455 KHz 2nd IF. -65 dB. -60 dB. 45 dB adjustable for optimum signal reception. 100 mV for 10 dB Change in Audio Output Adjustable; threshold less than 0.5 μV. RF type. 2 watts into 8 Ohms. AM and SSB : 300 to 2500 Hz. 8 Ohms, round. 8 Ohms; disables internal speaker when connected.

#### (SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE)

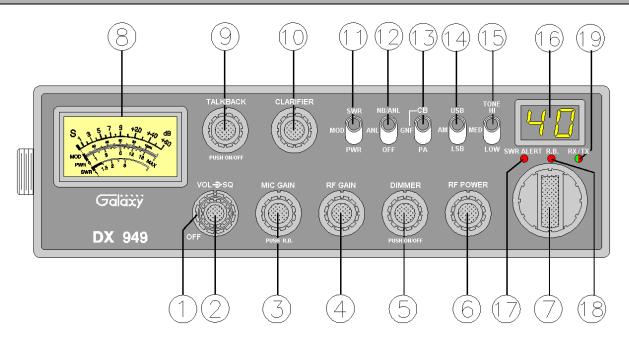


Figure 2-1 Front Panel

## **2.0 INTRODUCTION**

This section explains the basic operating procedures for the Galaxy DX 949 mobile transceiver.

## **2.1 CONTROL AND CONNECTIONS**

#### 2.1.1 FRONT PANEL

Refer to the above Figure 2-1 for the location of the following controls.

#### **1. SQUELCH CONTROL**

This control is used to control or eliminate receiver background noise in the absence of an incoming signal. For maximum receiver sensitivity, it is desired that the control be adjusted only to the point where the receiver background noise is eliminated. Turn fully counter-clockwise, then slowly clockwise until the receiver noise disappears. Any signal to be received must now be slightly stronger than the average received noise. Further clockwise rotation will increase the threshold level which a signal must overcome in order to be heard. Only strong signals will be heard at a maximum clockwise setting.

#### 2. ON/OFF VOLUME CONTROL

Turn clockwise to apply power to the radio and to set the desired listening level.

#### 3. MIC GAIN

Adjusts the microphone gain in the transmit and PA modes. This controls the gain to the extent that full talk power is available several inches away from the microphone. In the Public Address (PA) mode, the control functions as the volume control. Pushing this knob turns the Roger Beep on and off. When the Roger Beep is on, the radio transmits an audio tone at the end of your transmission. This indicates the end of your transmission so that people who are having trouble hearing you will know that you are done speaking. As a courtesy to others, use the Roger Beep only when necessary.

#### 4. RF GAIN CONTROL

This control is used to reduce the gain of the receive amplifier under strong signal conditions.

#### **5. DIMMER CONTROL**

This knob controls the level of brightness for the meter lamp and the LED channel display. Also, pushing this knob turns the meter lamp and the display LED's on and off.

#### **6. RF POWER CONTROL**

This control allows the user to adjust RF power output.

#### 7. CHANNEL SELECTOR

This control is used to select a desired transmit and receive channel.

#### 8. FRONT PANEL METER

The Front Panel Meter allows the user to monitor signal strength, RF output power, SWR level and AM modulation level.

#### 9. TALKBACK CONTROL

Pushing this knob turns the Talkback circuit on and off. Adjust this knob for desired volume of Talkback. This is used to monitor your own voice. For example, you could use this feature to compare different microphones.

#### **10. CLARIFIER**

Allows tuning of the receive frequency above or below the channel frequency by up to 1.0 KHz. Although this control is intended primarily to tune in SSB signals, it may be used to optimize AM signals.

#### 11. SWR/MOD/ PWR SWITCH

This switch controls the function of the meter during the transmit mode. In the SWR position, the meter indicates the Standing Wave Ratio (SWR) of your antenna. There are no adjustments because the SWR circuit in this radio calibrates itself automatically. When the switch is in the MOD position, the green scale on the meter indicates your percentage of modulation. This operates in AM only, not in SSB. When this switch is in PWR position, the meter indicates your power output.

#### **12. NB/ANL/OFF SWITCH**

In the ANL position, the Automatic Noise Limiter is activated. When the switch is placed in the NB/ANL position, the RF Noise Blanker is also activated. The Noise Blanker is very effective in eliminating repetitive impulse noise such as ignition interference.

#### 13. PA/GNF/CB SWITCH

In the PA position, your voice will come out of the speaker that you need to plug in to the PA. SP. jack on the rear panel. The radio does not operate when you are in the PA mode. The CB mode is normal operation of the radio. In the GNF mode, you are in CB operation but the Galaxy Noise Filter is engaged. This is a special noise filter that de-emphasizes audio high frequency response in order to increase the signal-to-noise ratio of weak signals. While you will notice a dramatic reduction in the "rushing" sound when this filter is activated, it does not have much effect on the signal-to-noise ratio of strong signals. It is mostly used for SSB reception.

#### **14. MODE SWITCH**

This control allows you to select one of the following operating modes : USB/AM/LSB .

#### **15. TONE SWITCH HI/MED/LO**

This switch changes tone quality in receive only. In LO position, bass is increased and in HI position, treble is increased.

#### **16. CHANNEL DISPLAY**

The channel display indicates the current selected channel.

#### **17. SWR ALERT LED**

This LED lights red when your SWR is higher than about 3:1. This is not an exact indicator of 3:1 SWR, but it is an indication that you should check your SWR reading.

#### 18. R.B. LED

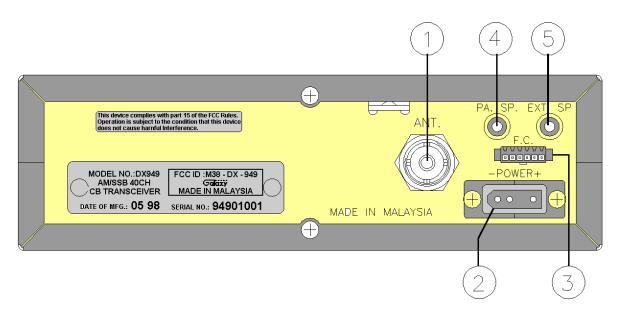
This lights green when the Roger Beep is on.

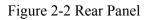
#### 19. RX/TX LED

This LED lights green during receive and red during transmit.

## 2.1.2 REAR PANEL

Figure 2-2 represent the location of the following connections :





## 1. ANTENNA

This jack accepts 50 ohms coaxial cable with a PL-259 type plug.

## 2. POWER

This connector accepts 13.8V DC power cable with built-in fuse. The power cord provided with the radio has a black and red wire. The black goes to negative and the red goes to positive.

## **3. FREQUENCY COUNTER CONNECTOR**

This connector is for the optional Galaxy FC 347 six digit frequency counter. All connections are made through this connector. No soldering is required.

#### 4. PA. SP.

This jack is for PA operation. Before operating, you must first connect a PA speaker ( 8 ohms, 4W ) to this jack.

## 5. EXT. SP.

This jack accepts 4 to 8 ohms, 5 watts external speaker. When the external speaker is connected to this jack, the built-in speaker will be disabled.

## 2.1.3 FREQUENCY CHART

CHANNEL	CHANN	NEL FREQUENCY	CHANNEL	CHANN	EL FREQUENCY
1	26.965	MHz	21	27.215	MHz
2	26.975	MHz	22	27.225	MHz
3	26.985	MHz	23	27.255	MHz
4	27.005	MHz	24	27.235	MHz
5	27.015	MHz	25	27.245	MHz
6	27.025	MHz	26	27.265	MHz
7	27.035	MHz	27	27.275	MHz
8	27.055	MHz	28	27.285	MHz
9	27.065	MHz	29	27.295	MHz
10	27.075	MHz	30	27.305	MHz
11	27.085	MHz	31	27.315	MHz
12	27.105	MHz	32	27.325	MHz
13	27.115	MHz	33	27.335	MHz
14	27.125	MHz	34	27.345	MHz
15	27.135	MHz	35	27.355	MHz
16	27.155	MHz	36	27.365	MHz
17	27.165	MHz	37	27.375	MHz
18	27.175	MHz	38	27.385	MHz
19	27.185	MHz	39	27.395	MHz
20	27.205	MHz	40	27.405	MHz

## **2.2 MICROPHONE**

The receiver and transmitter are controlled by the push-to-talk switch on the microphone. Press the switch and the transmitter is activated, release switch to receive. When transmitting, hold the microphone two inches from the mouth and speak clearly in a normal voice. The radio comes complete with low impedance (500 ohm) dynamic microphone. For installation instructions of the microphone, see section "ALTERNATE MICROPHONES AND INSTALLATION".

## **2.3 OPERATION**

## **2.3.1 PROCEDURE TO RECEIVE**

1. Be sure that power source, microphone and antenna are connected to the proper connectors before going to the next step.

- 2. Turn unit on by running **VOL** knob clockwise on transceiver.
- 3. Set the **VOL** to a comfortable listening level.
- 4. Set the **MODE** switch to the desired mode.

5. Listen to the background noise from the speaker. Turn the **SQ** knob slowly clockwise until the noise just disappears. Leave the control at this setting. This **SQ** is now properly adjusted. The receiver will remain quiet until a signal is actually received. Do not advance the control too far or some of weaker signals will not be heard.

- 6. Set the **CHANNEL** selector switch to the desired channel.
- 7. Set the **RF** gain control fully clockwise for maximum receive gain.

## 2.3.2 PROCEDURE TO TRANSMIT

1. Select the desired channel of transmission

2. Set the **MIC GAIN** control fully clockwise.

3. If the channel is clear, depress the push-to-talk switch on the microphone and speak in a normal voice.

## 2.4 ALTERNATE MICROPHONES AND INSTALLATION

For best results, the user should select a low impedance dynamic type microphone or a transistorized microphone. Transistorized type microphones have a low output impedance characteristic. The microphones must be provided with a four-lead cable. The audio conductor and its shielded lead comprise two of the leads. The third lead is for transmit control and the fourth is for receive control. The microphone should provide the functions shown in schematic below (Figure 2-3).

## 4 WIRE MIC CABLE

Pin Number	Mic Cable Lead
1	Audio Shield
2	Audio Lead
3	Transmit Control
4	Receive Control

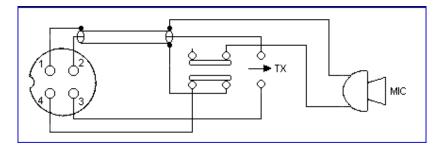


Figure 2-3 Your Transceiver Microphone Schematic

If the microphone to be used is provided with pre-cut leads, they must be revised as follows :

(i) Cut leads so that they extend 7/16" beyond the plastic insulating jacket of the microphone cable.(ii) All leads should be cut to the same length. Strip the ends of each wire 1/8" and tin the exposed wire.

Before beginning the actual wiring read carefully, the circuit and wiring information provided with the microphone you select. Use the minimum head required in soldering the connections. Keep the exposed wire lengths to a minimum to avoid shorting when the microphone plug is reassembled.

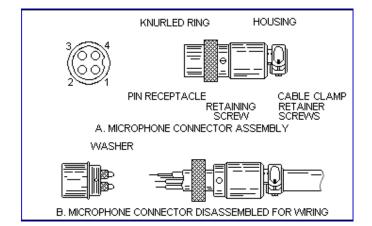


Figure 2-4 Microphone Plug Wiring

To wire microphone cable to the plug provided, proceed as follows :

- (i) Remove the retaining screw.
- (ii) Unscrew the housing from the pin receptacle body.
- (iii) Loosen the two cable clamp retainer screws.
- (iv) Feed the microphone cable through the housing, knurled ring and washer as shown Figure 2-4.

(v) The wires must now be soldered to the pins as indicated in the above wiring tables. If a vise or clamping tool is available it should be used to hold the pin receptacle body during the soldering operation, so that both hands are free to perform the soldering. If a vise or clamping tool is not available, the pin receptacle body can be held in a stationary position by inserting it into the microphone jack of the front panel. The numbers of the pins of the microphone plug are shown in Figure 2-5, as viewed from the back of the plug. Before soldering the wire to the pins, pre-tin the wire receptacle of each pin of the plug.

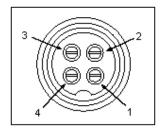


Figure 2-5 Microphone plug pin numbers viewed from rear of pin receptacle.

Be sure that the housing and the knurled ring of Figure 2-3 are pushed back onto the microphone cable before starting to solder. If the washer is not captive to the pin receptacle body, make sure that it is placed on the threaded portion of the pin receptacle body before soldering.

(vi) When all soldering connections to the pins of the microphone plug are complete, push the knurled ring and the housing forward and screw the housing onto the threaded portion of the pin receptacle body. Note the location of the screw clearance hole in the plug housing with respect to the threaded hole in the pin receptacle body. When the housing is completely threaded into the pin receptacle body, a final fraction of a turn either clockwise or counter-clockwise may be required to align the screw hole with the threaded hole in the pin receptacle body. When these are aligned, the retaining screw is then screwed into the place to secure the housing to the pin receptacle body.

(vii) The two cable clamp retainer screws should now be tightened to secure the housing to the microphone cord. If the cutting directions have been carefully followed, the cable clamp should secure to the insulating jacket of the microphone cable.

(viii) Upon completion of the microphone plug wiring, connect and secure the microphone plug in the transceiver.

CHAPTER 3

## **3.0 INTRODUCTION**

This section explains the technical theory of operation for the Galaxy DX 949 mobile transceiver.

## **3.1 PLL CIRCUIT**

The Phase Lock Loop (PLL) circuit is responsible for developing the receiver's first local oscillator signal and the transmitter's exciter signal. The PLL circuit consists primarily of IC2, IC3, Q25, Q27, Q28 and Q61. The PLL circuit is programmed by the user's rotary channel switch GPS-501. The switch allows GPS-501 to communicate the correct binary data information to the programmable divider inside of IC3. IC3 then controls the VCO (Voltage Controlled Oscillator), consisting of VCO to oscillate on the correct frequency. This signal is fed either into the receiver's first mixer (for receive operation) or the transmitter's mixer (for transmit operation).

#### **3.2 RECEIVER CIRCUIT**

The incoming receive signal come into the radio via the antenna and into the front end pre-amp consisting of Q17. The RF signal is fed into the mixer circuit of the Q18 and then into the AM IF section of the receiver (depending on the mode of operation). The signal is then detected by either the AM detector or product detector and then fed to the audio amplifier section of the receiver and finally out to the speaker.

#### **3.3 TRANSMITTER MODULATION CIRCUIT**

(i) The transmitter modulation circuit modulates the low level RF signal from the PLL exciter circuit with the user's audio voice signal from the microphone. The audio from the microphone is then amplified and fed into the balanced modulator circuit.

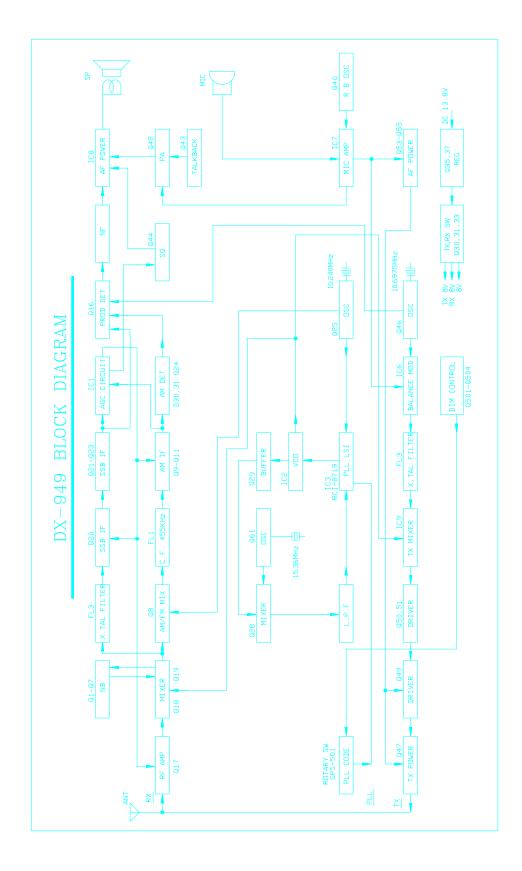
(ii) If the transceiver is in the AM mode, the AF amplifier controls directly the RF amplifier gain of the last RF amplifier which produces a true amplitude modulation RF signal.

(iii) If the transceiver is in the SSB mode, the audio signal is mixed with 10.6975MHz oscillator in IC6.

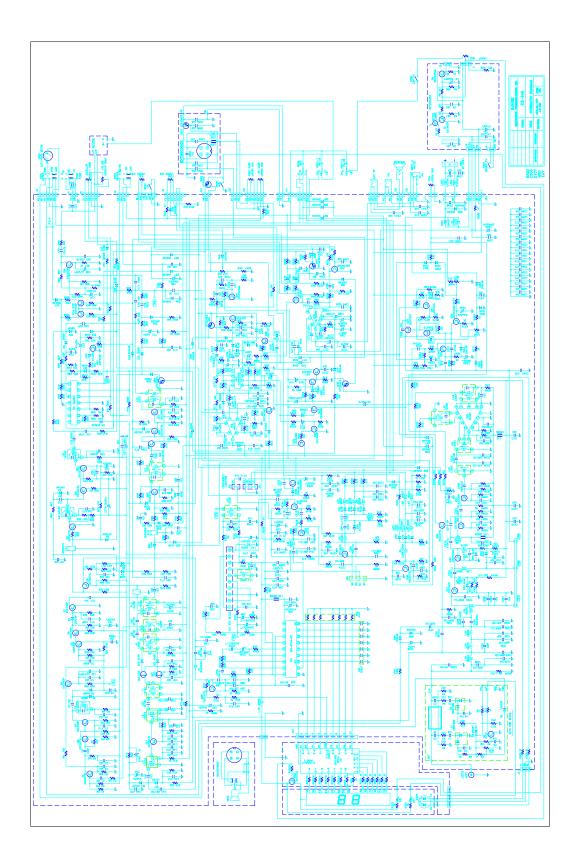
#### **3.4 TRANSMITTER AMPLIFIER CIRCUIT**

The transmitter takes the basic exciter signal from the TX mixer and amplifies it through a series of amplifiers consisting of Q50, Q51, Q49 and Q47 where it is sent out to the antenna connector.

## DX 949 BLOCK DIAGRAM



DX 949 CIRCUIT DIAGRAM



CHAPTER 4

## **4.0 REQUIRED TEST EQUIPMENT**

- ① DC Power Supply (13.8VDC, 10A)
- ② RF Wattmeter (25~60 MHz, 25W)
- ③ Multimeter
- (4) Automatic Modulation Meter
- <sup>(5)</sup> Audio Signal Generator

- <sup>6</sup> Frequency Counter (100 MHz)
- ⑦ RF Signal Generator (100 MHz)
- 8 Automatic Distortion Meter
- ③ Oscilloscope (50 MHz)
- 1 Sinad Meter

## 4.1 ALIGNMENT PROCEDURES

This transceiver has been aligned at the factory and does not require any adjustments at installation. The required test equipment listed are used for the test setup or alignment shown in Figure 4-1 Transmitter Test Setup and Figure 4-2 Receiver Test Setup. These test setup are used in part or total during the following adjustments and refer to Figure 4-3 for adjustment location.

## 4.1.1 PLL ALIGNMENT

ITEM	U.U.T. SETTING	ADJUST POINT	MEASUREMENT
VCO Voltage	Disconnect the "short PCB" from TP7, TP8 and TP9. Set radio to CH 1 AM RX	L14	2.6 VDC ± 0.1
	mode. Clarifier setting in 12 o'clock. Connect Oscilloscope to TP3. Set radio to CH 1 AM RX mode. Connect frequency counter IC 3 Pin 8	L15 VC1	Maximum Output 10.24000 MHz <u>+</u> 20 Hz
AM Frequency	Set radio to CH 1 AM RX mode. Connect frequency counter to TP3.	L20	16.27000 MHz <u>+</u> 20 Hz
USB Freq.	Set radio to CH 1 USB mode. Connect frequency counter to TP3.	L21	16.27250 MHz <u>+</u> 20 Hz
LSB Freq.	Set radio to CH 1 LSB mode. Connect frequency counter to TP3.	L22	16.26750 MHz <u>+</u> 20 Hz
TX Frequency Offset	Set radio to CH 1 LSB TX mode. Connect frequency counter to TP3	VR7	16.26750 MHz <u>+</u> 20 Hz
AM OSC	Set radio to CH 1 AM TX mode. Connect frequency counter to TP5	L23	10.69500 MHz <u>+</u> 20 Hz
USB OSC	Set radio to CH 1 USB TX mode. Set VR6 fully clockwise. Connect frequency counter to TP5.	L24	10.69250 MHz <u>+</u> 20 Hz
LSB OSC	Set radio to CH 1 LSB TX mode. Connect frequency counter to TP5. Connect scope to TP5 and adjust VR6 for minimum signal.	L25	10.69750 MHz <u>+</u> 20 Hz

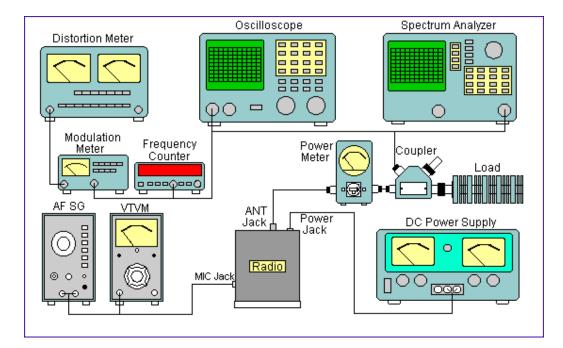
#### **4.1.2 TRANSMITTER ALIGNMENT**

ITEM	U.U.T. SETTING	ADJUST POINT	MEASUREMENT
BIAS Current	Set radio to CH 19 USB TX mode. MOD off. Connect current meter to TP7(+) and TP9(-) Connect current meter to TP7(+) and TP8(-)	VR12 VR10	50 mA 100 mA
SSB TX Power	Set radio to CH 19, USB TX mode. Connect "short PCB" to TP7 and TP9. Connect RF power meter to antenna jack. AF signal 30 mV, 1 KHz to microphone.	L40, L42, L43, L44 L40, L42	MAX ≥12W Spurious emission Min. Balance Power Between CH 1 and CH 40.
SSB ALC	Audio signal 30 mV, 1 KHz to microphone. Set radio to CH 19, USB TX mode.	VR13	11.5 W
SSB Carrier Balance	Set radio to CH 19, USB TX mode. Mic Gain off. Connect scope to Antenna Connector.	VR6	Spurious Emission To Minimum.
SSB APC	Set radio to CH 19, USB mode. MOD off. Connect Voltmeter to TP7.	VR17	DC12.5V
AM TX Power	Set radio to CH 19 AM TX mode. No MOD.	VR14	3.8W
RF Power Meter	Set radio to CH 19 AM TX mode. Mod off.	VR9	Adjust RF Power meter to "4" on PWR scale.
AM Modulation	Set radio to CH 19 TX mode. Audio signal 30 mV, 1 KHz to microphone. Set Mic Gain Fully Clockwise.	VR16	90%

## 4.1.3 RECEIVER ALIGNMENT

ITEM	U.U.T. SETTING	ADJUST POINT	MEASUREMENT	
AM Sensitivity	Set radio to CH 19 AM RX MODE. Clarifier setting at 12 o'clock. RF Gain fully clockwise, SQ fully counter clockwise. VOL control at 2 o'clock. Connect RF SG to antenna jack Output Frequency 27.185 MHz, MOD 30%. Set radio to CH 40 AM mode. RF SG setting 27.405 MHz. Set radio to CH 1 AM mode.	L2, L3, L5, L6, L7, L8, L9, L10	1	
USB Sensitivity	RF SG setting 26.965 MHz. Set radio to CH 19 USB mode. VOL control fully clockwise. RF SG setting to 27.186 MHz @ 0.5 uV	L11, L12	Audio output > 2V S/N 10 dB	
LSB Sensitivity	MOD to off Set radio to CH 19 LSB mode. VOL control fully clockwise. RF SG setting to 27.184 MHz @ 0.5 uV MOD to off	L11, L12	Audio output > 2V S/N 10 dB	
NB Adjust	Set radio to CH 19 AM mode RF SG setting 27.205 MHz @ 100 uV MOD 30%, NB/ANL switch on. Connect Voltmeter to TP1	L1	DC voltage to max. (>2.0V)	
AM Squelch	Set radio to CH 19 AM mode SQ control at fully clockwise. RF SG setting 10 mV, MOD 30%	VR4 Slowly	Adjust very slowly until squelch just closes	
SSB Squelch	Set radio to CH 19 USB mode. SQ control fully clockwise. RF SG setting 10 mV	VR3 Slowly	Adjust very slowly until squelch just closes	
AM S/RF Meter AM S-Meter			Meter needle to S9 on the S scale	
SSB S-Meter	Set radio to CH 19 USB mode. S/RF switch at S/RF position. RF SG setting 27.186 Mhz, MOD off 100 uV	VR2	Meter needle to S9 on the S scale	

## Figure 4-1 Transmitter test setup



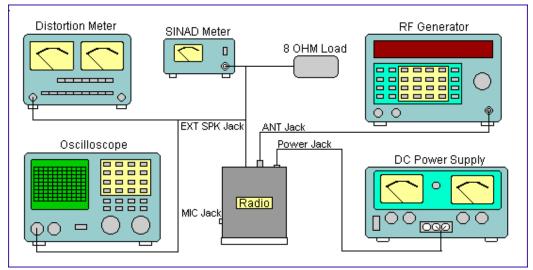


Figure 4-2 Receiver test setup

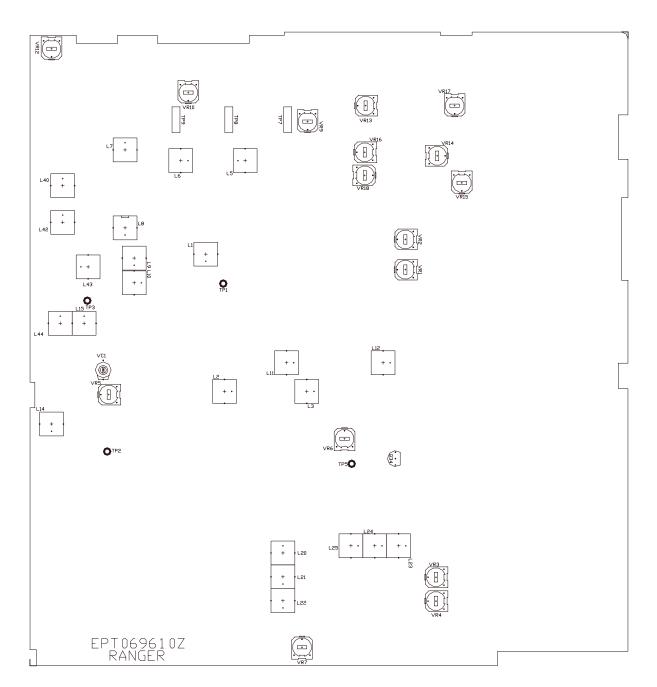


Figure 4-3 Main PCB Adjustment Locations

CHAPTER 5

## **5.0 PRECAUTIONS**

The inherent quality of the solid-state components used in this transceiver will provide many years of continuous use. Taking the following precautions will prevent damage to the transceiver.

(i) Never key the transmitter unless an antenna or suitable dummy load is connected to the antenna receptacle.

(ii) Ensure that the input voltage does not exceed 16 VDC or fall below 11 VDC.

(iii) During alignment, do not transmit for more than 10 seconds at a time. Transmitting over long periods can cause heat built-up and cause transmitter damage.

#### **5.1 PERIODIC INSPECTION**

This unit is aligned at the factory to deliver maximum performance. However, continued performance cannot be expected without periodic inspection and maintenance. Important points to be checked regularly are as follows;

Check Item	Action		
Whip antenna	If cracked or broken, replace it.		
(option)			
Coaxial cable	If sheath is cracked, seal with		
	vinyl tape. If immersed with		
	water, install new coaxial cable.		
Coaxial & power	If loosened, reconnect. If		
plug connections	corroded, clean contacts.		
Battery connection	If corroded, clean power		
	terminals.		
Ground terminal	If corroded, clean terminal.		

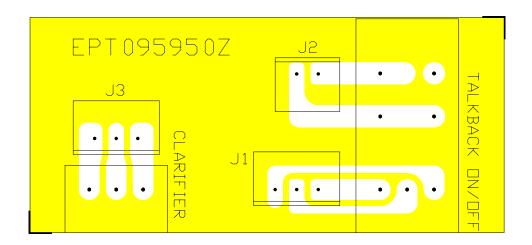
#### **5.2 FUSE REPLACEMENT**

To protect the equipment from serious damage, one fuse are provided on the power supply lines. The fuses protect against over voltage / reverse polarity of the vehicle's mains or internal fault of the equipment. If the fuse has blown, first find out the cause of the trouble before replacing it. A fuse rated for more than 4A should not be used, since it may permanently damage the equipment. Damage due to over fusing is not covered by the warranty.

CHAPTER 6

## 6.0 GENERAL

Information on most electrical and mechanical parts is included in the parts list. The reference designators are in alphanumeric order.

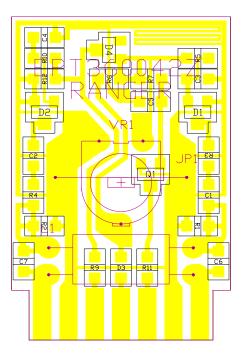


## PART LIST:

## DX 949 VR P.C.B

ITEM	REFERENCE NUMBER	RANGER PART NUMBER	DESCRIPTION
1		EPT095950Z	VR P.C.B.
2	J1,J2	EX07N48223	PCB C/S 2P
3	J3	EX07N48350	PCB C/S 3P
4	TALKBACK	RV10303543	10KB/PUSH SW
5	CLARIFIER	RV10203528	VR 1KB

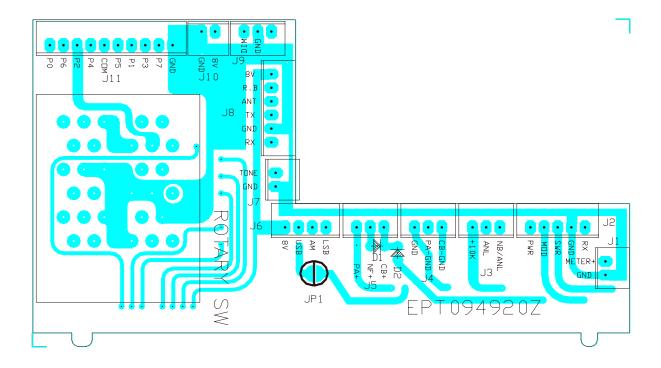
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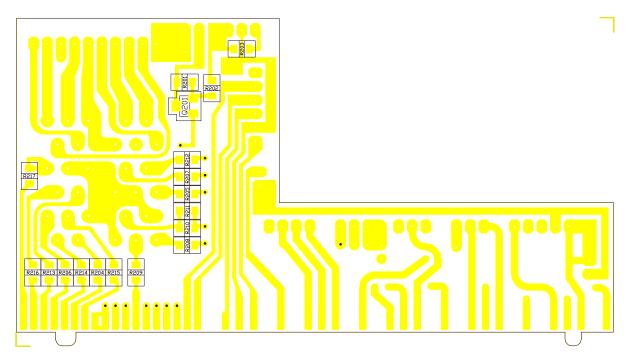


DX 949 ANT P.C.B

ITEM	REFERENCE	RANGER PART	DESCRIPTION
	NUMBER	NUMBER	
1		EPT360042Z	ANT P.C.B.
2	R9	RCY010004Z	0 ohm 0.1W
3	R1	RCY014714Z	470 ohm 0.1W
4	R3,R4	RCY011014Z	100 ohm 0.1W
5	R2	RCY013314Z	330 ohm 0.1W
6	R5,R11	RCY011024Z	1K ohm 0.1W
7	R10	RCY012224Z	2.2K ohm 0.1W
8	R12	RCY014724Z	4.7K ohm 0.1W
9	R7	RCY011034Z	10K ohm 0.1W
10	C5	RCY012234Z	22K ohm 0.1W
10	C7	CK1059AB1A	0.5PF 50V
11	C6	CK1030AB1A	3PF 50V
12	C3,C4	CK2104AB7R	0.1µF 50V
13	C1,C2	CK1102AB7L	0.001µF 50V
14	Q1	TY2SC2712G	TR 2SC2712
15	D3	EDSS00355Y	DIODE ISS355
16	D1,D2	EDHM0198SY	DIODE HSM198S
17	D4	EDMA0028TY	DIODE MA28T
18	L1	ECRFZ10053	CORE C3RH0610
19	VR1	RE10300009	10K ohm
20	JP1	WX01070715	JUMPER WIRE

REMARK: SOLDER SIDE (YELLOW)

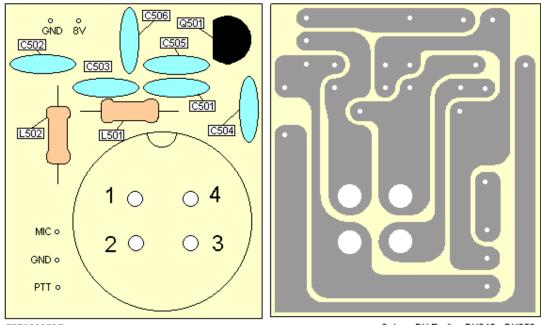




## DX 949 ROTARY SW P.C.B

ITEM	REFERENCE NUMBER	RANGER PART NUMBER	DESCRIPTION
1		EPT094920Z	ROTARY SW P.C.B.
2	R202,R204-R217	RCY011024Z	1K ohm 0.1W
3	Q201	TY2SC2712G	TR 2SC2712
4	ROTARY SW	EWRT32000S	ROTARY SW
5	J7,J9,J10	EX07N48223	PCB C/S 2P
6	J1	EX07N48234	PCB C/S 2P
7	J3,J5	EX07N48350	PCB C/S 3P
8	J4	EX07W48824	PCB C/S 3P
9	J6	EX07N48490	PCB C/S 4P
10	J2,J8	EX07N48222	PCB C/S 5P
11	J11	EX07N48209	PCB C/S 10P
12	D1,D2	EDIN04148Z	DIODE IN4148
13	COPPER SIDE	CM0503935Z	0.039µF 50V

REMARK: COMPONENT SIDE (CYAN) SOLDER SIDE (YELLOW)



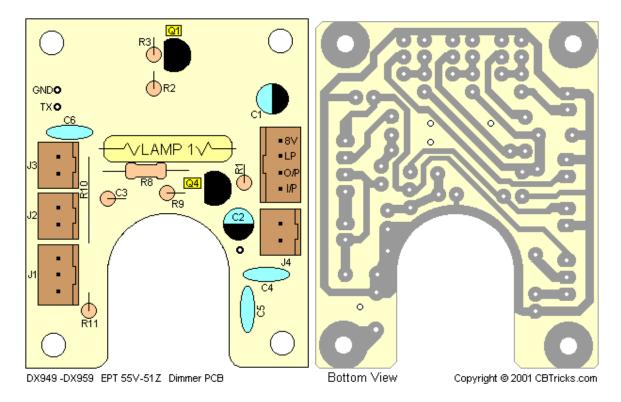
EPT690050Z

Galaxy DX Radios DX949 - DX959 CBTricks.com

## PART LIST :

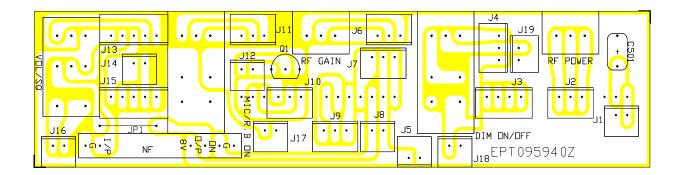
## DX 949 MIC P.C.B

ITEM	REFERENCE	RANGER PART	DESCRIPTION
	NUMBER	NUMBER	
1		EPT690050Z	MIC P.C.B.
2	C501,C502,C503,C504	CC0501027L	0.001µF 50V
3	C505,C506	CC0501037L	0.01µF 50V
4	Q501	TDTA0124ES	T/R DTA124ES
5	L501	ECCHK16001	CHOKE COIL 5.6µH
6	L502	ECBAD18526	BEAD COIL
7	MIC PCB	EX06N41020	MIC JACK
8	J12	EX07N48903	WIRE C/H 3P
9	J26	EX07N48233	WIRE C/H 2P



## DX 949 METER P.C.B

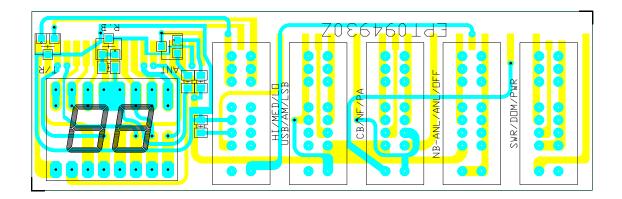
ITEM REFERENCE RANGER PART DESCRIPT	TION
NUMBER NUMBER	
1 EPT055V51Z METER P.	C.B.
2 R11 RCP166824Z 6.8K ohm 1	/16W
3 R9 RCP163934Z 39K ohm 1/	/16W
4 R1 RCU143904Z 39 ohm 1/	'4W
5 C3 RCU141024Z 1K ohm 1/	/4W
6 R3 RCU144724Z 4.7K ohm 1	l/4W
7 R2 RCU141034Z 10K ohm 1	/4W
8 R8 RCM144724B 4.7K ohm 1	l/4W
9 R10 WX01070712 JUMPER W	VIRE
10 C4,C5,C6 CC0501037L 0.01µF 50	0V
11 C2 CE0251067Z 10µF 25	V
12 C1 CE0164767Z 47µF 16	
13 Q1,Q4 T2SC00945P TR 2SC94	
14 J2,J3,J4 EX07N41226 PCB C/S	2P
15 POW EX07N41250 PCB C/S	4P
16 J1 EX07N41216 PCB C/S	
17 LAMP1 EX02N40230 LAMP 0.05	5 12V



DX 949 BAND P.C.B

ITEM	REFERENCE	RANGER PART	DESCRIPTION
	NUMBER	NUMBER	
1		EPT095940Z	BAND P.C.B.
2	VOL/SQ	RV50303522	VR 50KB/50KA W/SW
3	<b>RF GAIN</b>	RV10203528	VR 1KB
4	DIM ON/OFF	RV50203542	5KB/PUSH SW
5	MIC/R.B ON	RV10203541	1KA/PUSH SW
6	<b>RF POWER</b>	RV50203525	VR 5KB
7	BAND P.C.B.	ENRG0IC080	MODULAR IC080
8	JP1	WX01070710	JUMPER WIRE
9	J2,J8,J12,J16,J17	EX07N48223	PCB C/S 2P
10	J4,J6,J11	EX07N48350	PCB C/S 3P
11	J13	EX07W48826	PCB C/S 5P
12	Q1	TDTA0124ES	T/R DTA124ES

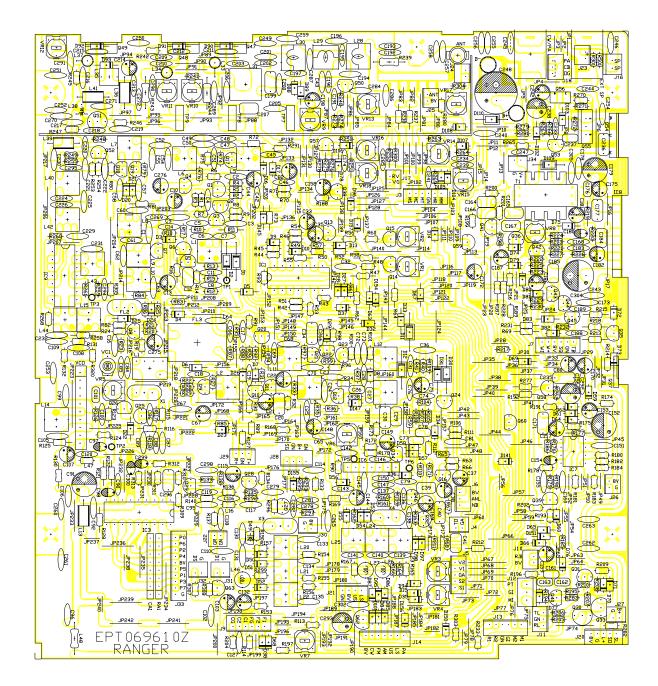
REMARK: SOLDER SIDE (WHITE)



DX 949 DISPLAY P.C.B

ITEM	REFERENCE NUMBER	RANGER PART NUMBER	DESCRIPTION
1	NOWIDER		
1		EPT094930Z	DISPLAY P.C.B.
2	DISPLAY P.C.B.	EX03N40483	LED DISPLAY
3	R325,R326	RCY011024Z	1K ohm 0.1W
4	C501	CK1103AB6U	0.01µF 50V
5	ANT	EX01Y40116	LED LAMP
6	R.B	EX01Y40117	LED LAMP
7	T/R	EX01Y40114	LED LAMP
8	HI/MED/LO	EWSL31027K	SLIDE SW
9	USB/AM/LSB	EWSL31027K	SLIDE SW
10	CB/NF/PA	EWSL31027K	SLIDE SW
11	NB-ANL/ANL/OFF	EWSL31027K	SLIDE SW
12	SWR/DOM/PWR	EWSL31027K	SLIDE SW

REMARK: SOLDER SIDE (YELLOW & CYAN)



DX 949 MAIN PCB.

REMARK: SOLDER SIDE (WHITE)

#### PART LIST **DX 949 MAIN PCB**

REFERENCE     RANCER     DESCRPTION     C227     CCC00023       TP7, 8, 9     EPT0690102     MAIN F.C. B     C4     70     CC000033       TP6     EPT0690102     0.4 1/16M     C137     CC000013       TP6     RC11000012     0.4 1/16M     C137     CC000013       TP6     RC11000012     0.4 1/16M     C137     CC000013       R867     RC1161042     10.4 1/16M     C31     CC000013       R813,133,213,23,23,228     RC11647042     47     11/16M     C52,197     CC000013       R13,103,215,270,274     RC71611142     100     0.1/16M     C44,55     C47     CC000023       S1,69,174,260,283     RC71611142     100     0.1/16M     C34,55     CC000023       R21,00,245     RC71647142     470     0.1/16M     C136,191     CC000023       R38,250,264,220,293     RC71647142     470     0.1/16M     C136,191     CC000033       R34,95,94,203     RC71647142     470     0.1/16M     C136,101     CC000033       R34,95,94,203     RC71647142 </th <th>DX 949 MAIN</th> <th>РСВ</th> <th></th> <th>C1,49,108,147 C76</th> <th>CC050100 CC050180</th>	DX 949 MAIN	РСВ		C1,49,108,147 C76	CC050100 CC050180
NUMBER     PART NO.     C8     CC000021       PT7, 8, 9     EPT12060612     P.C. B DC B+     C13.7     CC00012       R24     BC71600042     0.0 1/16W     C13.136     CC000027       R246     BC71610042     10.0 1/16W     C11.14     CC000027       R245     BC71610042     24.0 1/16W     C23.100     CC000027       R2415     BC71610042     24.0 1/16W     C33.100     CC000027       R2415     BC71610142     100.0 1/16W     C44.89     CC000007       R10.0 125, 20, 33, 76, 11     RC71610142     100.0 1/16W     C44.89     CC000003       R23, 100, 245     RC71615142     130.0 1/16W     C139, 226, 279     CC000033       R23, 100, 245     RC71612142     20.0 1/16W     C139, 126, 255, 222     CC000033       R240, 163, 177     RC71622142     20.0 1/16W     C139, 126, 255, 222     CC000033       R258, 266     RC7161244     100.0 1/16W     C130, 126, 255, 222     CC000033       R258, 266, 280, 293     RC71612747     KG 0.0 1/16W     C130, 126, 257, 222     CC000033       R			D D C CD VD D C L		CC050270
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			DESCRIPTION	C287	
Pir, Pi, 9.     EPT1200602     P. C.B DC B.     Cl37     CC00015       R246     RCP1610042     10 0 1/16W     Cl1, 14     CC00033       R246     RCP1610402     10 0 1/16W     Cl1, 14     CC00033       R247     RCP1620402     22 0 1/16W     C23     CC00005       R13, 133, 213, 253, 282     RCP165042     56 0 1/16W     C64, 55     CC00005       R13, 0, 20, 37, 6, 81, RCP165142     100 0 1/16W     C44, 55     CC00005       R23, 100, 245     RCP1618142     180 0 1/16W     C15, 226, 279     CC00033       R23, 100, 245     RCP1618142     180 0 1/16W     C15, 191     CC00013       R240, 163, 177     RCP163142     270 0 1/16W     C149, 245, 252, 222     CC00013       R36, 10, 16, 24, 248, 254, RCP163142     270 0 1/16W     C149, 192     CC00033       R256, 266, 260, 290     RCP1661242     560 0 1/16W     C149, 192     CC00033       R256, 266, 260, 290     RCP1661242     10 0 1/16W     C14, 192     CC00033       R256, 266, 260, 290     RCP1661242     116W     C14, 117     CC00033	NUMBER	PART NO.		C8	CC05082
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		EPT069610Z	MAIN P.C.B	C4,70	CC05010
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	IP7,8,9				
R246     RCP1610042     10 g 1/16W     C11,14     CC05035       R267     RCP1615042     15 g 1/16W     C23     CC05005       R13,132,13,25,23,28     RCP162042     22 g 1/16W     C23     CC05005       R13,132,15,220,294     RCP165042     56 g 1/16W     C61,62,90,190     CC05005       R13,56,50,33,76,61     RCP165142     100 g 1/16W     C44     CC05013       R22,100,245     RCP165142     180 g 1/16W     C15,22,727     CC05010       R23,56,50,33,73,76,61     RCP165142     180 g 1/16W     C15,191     CC05010       R246,10,16,24,248,244     RCP1667142     700 g 1/16W     C156,191     CC05010       R140,162,177     RCP1667142     700 g 1/16W     C156,191     CC05010       R228,266     RCP1666142     560 g 1/16W     C140     CC05010       R148,250,266,260,293     RCP1666142     560 g 1/16W     C140     CC05010       R14,46,77,79,00     RCP166244     1K g 1/16W     C24,1117     CC05010       R14,46,77,79,00     RCP1612424     1K g 1/16W     C14,44,77,29,00     CC05010 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
R267     RCP1615042     15 G 1/16W     C23     CC03056       R241     RCP162042     22 G 1/16W     C225     CC03005       R13,13,213,253,263     RCP1646042     66 G 1/16W     C64,69,00,190     CC03005       R1,101     RCP166042     100 G 1/16W     C64,69,00,190     CC03005       S3,160,215,20,204     RCP165142     100 G 1/16W     C13,226,279     CC03005       S3,100,215     RCP165142     200 G 1/16W     C13,226,279     CC03005       S31,99     RCP165142     200 G 1/16W     C150,191     CC05016       S31,99     RCP165142     200 G 1/16W     C150,191     CC05016       S44,50,89,94,209     RCP1656142     560 G 1/16W     C130     CC05016       R258,266     RCP1656142     560 G 1/16W     C130     CC05016       R44,50,89,94,209     RCP1668142     560 G 1/16W     C130     CC05016       R26,264,67,72,79,40     RCP1662142     120 G 1/16W     C130     CC05016       R44,50,89,94,209     RCP1668142     120 G 1/16W     C130     CC05010       R21,422,195,27					
R241     RCP1622042     22 Ω 1/16W     C225     CC05005       R13,13,23,225,23,282     RCP1656042     56 Ω 1/16W     C51,62,90,190     CC05005       R3,5,8,30,33,76,81,     RCP1615142     100 Ω 1/16W     C14,290,190     CC05005       R3,10,245     RCP1615142     150 Ω 1/16W     C14,22,279     CC05003       R3,100,245     RCP1615142     150 Ω 1/16W     C19,226,279     CC05005       R3,30     RCP165142     150 Ω 1/16W     C19,226,279     CC05005       R3,30     RCP165142     270 Ω 1/16W     C18,191     CC05005       R3,30     RCP165142     270 Ω 1/16W     C130,191     CC050018       R48,500,268,280,293     RCP165142     500 Ω 1/16W     C136,191     CC050018       R48,500,264,67,72,79,00     RCP1661242     820 Ω 1/16W     C136,121     CC05010       R52,562,266     RCP1661242     1K Ω 1/16W     C136,120     CC05010       R54,812,282,82,040     RCP1612242     1K Ω 1/16W     C13,120,110,114     C05002       R54,812,282,82,82,82,82,82     RCP1612242     1K Ω 1/16W     C13,120,110,114					
R130, 215, 220, 234   RCP1656042   6 G 1 /16W   C61, 62, 90, 190   CC05015     R3, 5, 8, 30, 33, 76, 81   RCP1610143   100 μ 1/16W   C33   CC05015     R32, 100, 245   RCP1610142   150 μ 1/16W   C24, 55   CC05005     R32, 100, 245   RCP1610142   150 μ 1/16W   C13, 226, 279   CC05003     R33, 99   RCP1610142   210 μ 1/16W   C150, 191   CC05005     R43, 99   RCP1621142   210 μ 1/16W   C150, 191   CC05005     R65, 250, 223   RCP1647142   470 μ 1/16W   C139, 141   CC05015     R459, 266, 266, 280, 293   RCP166142   650 μ 1/16W   C136, 121   CC05015     R459, 266, 266, 293, 222   CC05010   CC38   CC05010   CC38     R459, 266, 269, 293, 220   RCP1661242   R0 μ 1/16W   C130   CC05010     R52, 564, 67, 72, 79, 80,   RCP1661242   R0 μ 1/16W   C281   CC05010     R52, 57, 72, 79, 132, 207, 721,   RCP1612242   RX μ 1/16W   C130, 174   C282   CC05010     R52, 77, 79, 136, 144, R64, 205, 207, CC05010   C13, 274, 274, 284, 264, 205, 207, C05010   C13, 274, 750, 744, 599, 99   CC05					
R11, 101 RCP165042 66 $\alpha$ 1/16W C44, 89 CC505015 R55, 56, 30, 33, 76, 61, RCP165142 100 $\alpha$ 1/16W C44, 55 CC505015 R55, 169, 174, 260, 253 RCP165142 150 $\alpha$ 1/16W C64, 55 CC505027 RCP165142 220 $\alpha$ 1/16W C68 CC505027 RCP1652142 220 $\alpha$ 1/16W C194, 192 CC50515 R30, 99 RCP162142 270 $\alpha$ 1/16W C194, 192 CC50515 R30, 99 RCP162142 270 $\alpha$ 1/16W C194, 192 CC50515 R30, 99 RCP162142 270 $\alpha$ 1/16W C194, 192 CC50515 R30, 99 RCP165142 470 $\alpha$ 1/16W C194, 192 CC50515 R30, 99, 84, 209 RCP1647142 470 $\alpha$ 1/16W C196, 295, 222 CC505018 R259, 256, 256 RCP1656142 560 $\alpha$ 1/16W C136, 171 CC50510 R42, 54, 67, 77, 79, 80, RCP1650142 1K $\alpha$ 1/16W C196, 171 CC50510 R42, 54, 67, 77, 79, 80, RCP1610242 1K $\alpha$ 1/16W C38 17 CC50507 R54, 87, 97, 71, 82, 80, RCP1610242 1K $\alpha$ 1/16W C38 17 CC50507 R54, 87, 97, 71, 82, 80, RCP1610242 1K $\alpha$ 1/16W C38 17 CC50507 R54, 87, 97, 71, 82, 80, RCP1610242 1K $\alpha$ 1/16W C38 17 CC50507 R54, 87, 97, 71, 82, 80, RCP1612242 1K2 $\alpha$ 1/16W C38 20 CC50503 R54, 87, 97, 71, 82, 80, RCP1612242 1K2 $\alpha$ 1/16W C38 20 CC50503 R54, 87, 97, 71, 82, 80, RCP1612242 1K2 $\alpha$ 1/16W C38, 200, 200, 80, 200, 200, 200, 200, 200	R113,133,213,253,282	RCP164704Z	47 Ω 1/16W	C52,197	CC05001
R11, 101   RCP166042   66 g 1/16W   C24, 89   CC05015     85, 56, 30, 33, 76, 81,   RCP1615142   100 g 1/16W   C34, 55   CC05022     823, 100, 245   RCP1615142   150 g 1/16W   C34, 55   CC05022     R23, 100, 245   RCP1615142   150 g 1/16W   C38   CC05022     R31, 99   RCP162142   220 g 1/16W   C38   CC05033     S00   RCP162142   270 g 1/16W   C19, 192, 226, 220   CC05033     S19   RCP165142   300 g 1/16W   C19, 192, 222   CC05033     S29, 266   RCP165142   500 g 1/16W   C140   CC05036     S29, 266   RCP165142   500 g 1/16W   C140   CC05036     S29, 266, 264, 67, 72, 79, 80, RCP1610242   1K g 1/16W   C141   CC05036     S21, 152, 152, 150, 164, 166, 166, 167, 179, 796, 79, 295, 303   CC050307   CC050307     S21, 222, 189, 238, 240, 237, 271, 232, 295, 303, 214, 232, 2199, 238, 240, 237, 212, 242, 254, 245   CC05010   C28, 201, 203, C05030     S20, 277, 173, 75, 114, RCP162242   1K50 1/16W   C7, 47, 50, 74, 750, 74, 95, 95   CC05010     S20, 271, 1232, 295, 203, 214, 2232, 219, 232, 219, 232, 219, 232, 212, 232, 2	R130,215,220,294	RCP165604Z	56 Ω 1/16W	C61,62,90,190	CC05005
$ \begin{array}{llllllllllllllllllllllllllllllllllll$		RCP166804Z	68 Ω 1/16W	C84,89	CC05015
59,169,174,260,263     C54,55     CC05022       R23,100,25     RCP1615143     150 Ω 1/16W     C18,226,279     CC050327       R23,100,25     RCP161143     150 Ω 1/16W     C20,224     CC05010       R240,163,177     RCP162142     270 Ω 1/16W     C18     CC05010       R5,10,16,24,248,254,     RCP162142     270 Ω 1/16W     C19,192     CC05033       300     RCP162142     470 Ω 1/16W     C19,6,29,222     CC05033       229,154,155,156     RCP1656142     560 Ω 1/16W     C116,117     CC05033       R256,266     RCP1656142     560 Ω 1/16W     C116,117     CC05033       R24,46,57,72,79,80,     RCP166142     820 Ω 1/16W     C116,117     CC05033       R24,46,57,72,79,80,     RCP1612242     1K Ω 1/16W     C166     CC05037       R27,21,232,189,230,20,7     RCP1612242     1K Ω 1/16W     C216,210     CC05010       R31,492     RCP1612242     1K Ω 1/16W     C16,210     CC05010       R23,247,251,253,273     RCP1612242     1K Ω 1/16W     C16,210,20,256     C05010       R31,492,451,460,45,16					
Rady_100_245     RCP1618142     150 D 1/16W     C119,226,279     CC000033       Rady     RCP1618142     180 D 1/16W     C202,224     CC05066       Rady     RCP162142     220 D 1/16W     C150,191     CC05066       Rady     RCP162142     270 D 1/16W     C150,191     CC05016       S00     C195,250,268,280,293     RCP167142     470 D 1/16W     C130     CC050015       R255,266     RCP165142     560 D 1/16W     C130     CC050015       R256,266     RCP165142     80D D 1/16W     C130     CC050015       R258,266     RCP165142     80D D 1/16W     C130     CC050015       R264,6467,72,79,80,     RCP1612242     1K D 1/16W     C281     CC050016       S16-138,123,200,71,     CC260     CC050027     CC050016       S17,212,223,180,234,210,232,200,71,     CC16     CC3     CC050027       S16,113,122,200,71,     CC16     CC40     C7,47,50,74,55,99,     CC05002       S14,422,189,238,240,     CC5161242     1K2 D 1/16W     C71,47,50,74,56,50,     CC50,02       S14,42,64,55,73 <td></td> <td>1011010110</td> <td>100 32 1/100</td> <td></td> <td></td>		1011010110	100 32 1/100		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		DOD1 (1 51 4 7	150 0 1 /1 (14		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $					
R31,99     RCP1627142     270 ω 1/16W     C150,191     CC05015       300     L/16W     C194,192     CC05015     CC05015       301     L/16W     C194,192     CC05015     CC05015       302     RCP163142     470 ω 1/16W     C136,295,222     CC05015       258,266     RCP1656142     660 ω 1/16W     C140     CC05015       R4,50,89,94,209     RCP165142     620 ω 1/16W     C140     CC05027       R52,66     RCP165142     620 ω 1/16W     C140     CC05015       R52,64,67,72,79,80     RCP161242     1K ω 1/16W     C140     CC05027       R52,52,71     RCP161242     1K ω 1/16W     C16,210     CC050027       R7,17,73,175,114     RCP161242     1K2 ω 1/16W     C1,7,7,75,74,95,99     C05001       R54,67,97,175,714,75,714     RCP161242     1K2 ω 1/16W     C14,71,73,73,206,207,     CC05010       R22,62,71,173,75,114     RCP161242     1K2 ω 1/16W     C14,71,73,73,206,207,     CC05010       R24,64,65,66,64,110,     RCP161242     2K7 ω 1/16W     C13,71,75,202,73,207,302     C05047					
$ \begin{array}{c} \text{Re}_{10}, 16, 24, 248, 254, \\ \text{RCP163142} \\ 300 \\ \text{CCSS013} \\ 300 \\ \text{RCS}_{29}, 154, 155, 156 \\ \text{CCSS039} \\ \text{RCP1656142} \\ \text{CCSS013} \\ \text{RCP1656142} \\ \text{CCSS013} \\ \text{RCP1656142} \\ \text{CCSS013} \\ \text{RCP1661242} \\ \text{RCP161242} \\ \text{RCP1612442} \\ \text{RCP1612444} \\ \text{RCP16125442} \\ \text{RCP1612544} \\ \text{RCP16125442} \\$					
300     C195     CC05039       2299,154,155,156     RCP1647142     470 Ω 1/16W     C136,235,222     CC05018       2299,154,155,156     RCP1656142     560 Ω 1/16W     C140     CC05015       R4,50,89,94,209     RCP1661424     660 Ω 1/16W     C140     CC05068       R42,64,67,72,79,80,     RCP1601242     1K Ω 1/16W     C16,117     CC05068       R52,64,67,72,79,80,     RCP1610242     1K Ω 1/16W     C16,210     CC05016       R52,52,81,0164,166,     C282     CC05018     CC05027     CC05027       R16,118,22,70,206,     C216,210     CC05047     CC05010     CC05047       R54, 87,97,132,207,     RCP161242     1K2 Ω 1/16W     C7, 74, 75, 74, 95, 96, 102, 105, 174, 133, 206, 207, 207, 203, 206, 207, 203, 206, 207, 207, 207, 207, 208, 201, 201, 206, 207, 207, 206, 207, 207, 208, 201, 201, 206, 207, 207, 208, 201, 201, 206, 207, 207, 206, 207, 207, 208, 201, 201, 206, 207, 207, 206, 201, 201, 206, 207, 207, 206, 204, 249, 240, 206, 20	R31,99	RCP162714Z	270 Ω 1/16W	C150,191	CC05010
300     C195     CC05039       2299,154,155,156     RCP165142     470 Ω 1/16W     C196,235,222     CC05018       2299,154,155,156     RCP1656142     660 Ω 1/16W     C140     CC05015       R4,50,89,94,209     RCP1661424     680 Ω 1/16W     C140     CC05005       R4,67,72,79,80,     RCP1661424     820 Ω 1/16W     C146,117     CC05068       R52,64,67,72,79,80,     RCP1610242     1K Ω 1/16W     C16,210     CC05016       R52,52,81,01,64,166,     C20     CC05027     CC05027     CC05027       R7,179,186,205,206,     C146     C16,210     CC05047     CC05010       R24,232,129,239,303,     C19     CC30056     CC05027     C05010       R25,47,71,73,75,114,     RCP161242     1K2 Ω 1/16W     C14,72,13,20,70,     CC05101       R24,237,21,259,264,21,252,263,266,21     1K5 Ω 1/16W     C13,173,193,206,207,     CC05010       R24,247,21,232,293,303,304     C14,287,92,96,102,105,     CC05010     C13,21,249,250,256,267       R26,25,281,21,153     RCP162242     2K7 Ω 1/16W     C3,242,45,46,162,163,66,66,66,73,102,105,103,114,161,160,233,125,162,225,252,257,8	R6,10,16,24,248,254,	RCP163314Z	330 Ω 1/16W	C194,192	CC05015
R188,250,256,280,293     RCP1647142     470 Ω 1/16W     C196,295,222     CC05018       R259,266     RCP166142     560 Ω 1/16W     C140     CC05013       R258,266     RCP166142     680 Ω 1/16W     C116,117     CC05020       R24     R46,77,79,80, RCP1601242     1K Ω 1/16W     C281     CC05010       R27,116,118,122,223,     RCP1601242     1K Ω 1/16W     C281     CC05010       R151,823,70,271,     RC2     C200     CC05020     CC05010       R161,82,823,240,     C216,210     CC05020     CC05010       R17,179,184,205,226,     RCP1612242     1K5 Ω 1/16W     C1,747,50,74,95,99,     CC05010       R20,27,71,73,75,114,     RCP1612242     1K5 Ω 1/16W     C11,71,132,206,207,     CC05010       R20,27,71,73,75,114,     RCP162242     2K7 Ω 1/16W     C13,213,206,207,     CC05010       R218,22,58,60,66,110,     RCP163242     2K7 Ω 1/16W     C13,213,213,206,207,     CC05010       R23,27,271,73,75,114,     RCP163242     2K7 Ω 1/16W     C35,260,261,223,252,256,267,276,276,276,276,276,276,276,276,27					CC05039
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		DCD1647147	470 0 1/16W		
$ \begin{array}{c} 2258,266 & \text{RCP1656142} & 560 \ 0 \ 1/16W & C140 & CC05012 \\ RA (50, 89, 94, 209 & \text{RCP16612142} & 680 \ 0 \ 1/16W & C130 & CC05012 \\ RCP1662142 & 820 \ 0 \ 1/16W & C181 & CC05020 \\ C281 & CC05010 & C282 & CC05012 \\ C282 & CC05012 & CC05022 \\ C15, 252, 160, 164, 166, & C65, 200 & C283 & CC05022 \\ C17, 179, 186, 205, 206, & C85, 201, 203 & CC05023 \\ C19 & C05020 & C199 & C030056 \\ R86, 192 & \text{RCP1612242} \ 1K2 \ 0 \ 1/16W & C7, 47, 50, 74, 95, 99, & CC05010 \\ R20, 27, 71, 73, 75, 114, & RCP1612242 & 1K5 \ 0 \ 1/16W & C81, 173, 193, 206, 207 & CC05010 \\ R20, 27, 71, 73, 75, 114, & RCP1612242 & 2K2 \ 0 \ 1/16W & C110, 118, 120, 110, 174, \\ R22, 258, 60, 66, 110, & RCP163242 & 2K7 \ 0 \ 1/16W & 213, 211, 249, 250, 225, \\ R2, 259, R2, 259, R2, 121, 153 & RCP1627242 & 2K7 \ 0 \ 1/16W & 240, 251, 252, 253, 226, \\ R23, 252, 254, 265, 93 & RCP165242 & 5K6 \ 0 \ 1/16W & 248, 64, 65, 666, \\ RC9163242 & 3K8 \ 0 \ 1/16W & 240, 251, 252, 253, 257, \\ R26, 34, 131, 165, 190, & RCP165242 & 5K6 \ 0 \ 1/16W & 248, 261, 263, 265, \\ R23, 252, 264, 265, 93 & RCP165242 & 5K6 \ 0 \ 1/16W & 248, 261, 263, 265, \\ R24, 264, 265, 98 & RCP165242 & 5K6 \ 0 \ 1/16W & 240, 251, 252, 253, 257, \\ R26, 34, 131, 165, 190, & RCP1663242 & 5K6 \ 0 \ 1/16W & 258, 260, 261, 263, 266, \\ R33, 92, 264, 265, 93 & RCP1662242 & 5K6 \ 0 \ 1/16W & 2158 & CC05022, 278, 217, 219 \\ R33, 92, 264, 255, 93 & RCP1662242 & 5K6 \ 0 \ 1/16W & 2158 & CC05022, 278, 217, 219 \\ R44, 0, 41, 70, 82, 312 & RCP1662342 & 21K \ 0 \ 1/16W & 279, 273, 203, 285, 247 \\ R45 & RCP163342 & 38K \ 0 \ 1/16W & 138, 142, 145, 146, 149 \\ R46 & RCP163342 & 38K \ 0 \ 1/16W & 277, 133, 284, 134, 135 \\ R46 & RCP163342 & 38K \ 0 \ 1/16W & 277, 133, 284, 134, 145, 146, 149 \\ R49, 551, 170, 172, 176 & RCP164742 & 270K \ C39, 182, 414, 514, 6149 \\ R49, 551, 170, 172, 176 & RCP164742 & 270K \ C39, 185, 41 & CM05010 \\ R49, 551, 170, 172, 176 & RCP164742 & 270K \ C34, 20 & C176 & CM05010 \\ R48 & RCP163242 & 22K \ 0 \ 1/16W & C176 & CM05010 \\ R49, 551, 170, 172, 176 & RCP164742 & 270K \ 0 \ $		RCF104/142	4/0 22 1/100		
A4, 50, 89, 94, 209     RCP1668142     680 Ω 1/16W     C130     CC05020       R74     RCP1682142     820 Ω 1/16W     C116,117     CC05068       R62, 64, 67, 72, 79, 80,     RCP1610242     1K Ω 1/16W     C281     CC05018       R62, 64, 67, 72, 79, 80,     RCP1610242     1K Ω 1/16W     C281     CC05018       R61682142, 618, 122, 223, 232, 205,     CC05027     C85, 201, 203     CC05027       R74, 50, 74, 95, 238, 240,     C216, 210     CC05027     C85, 201, 203     CC05047       S27, 231, 232, 247, 253, 233,     RCP161224Z     1K2 Ω 1/16W     C7, 47, 50, 74, 95, 99,     CC05010       R88, 192     RCP161224Z     1K2 Ω 1/16W     C7, 47, 50, 74, 95, 99,     CC05010       S23, 247, 251, 255, 273     RCP161224Z     1K2 Ω 1/16W     C81, 173, 193, 206, 207,     CC05010       R54, 97, 77, 73, 75, 114,     RCP161224Z     2K2 Ω 1/16W     C81, 132, 219, 232, 233, 247, 250, 255, 273, 227, 232, 230, 237, 235, 252, 281, 217, 153     RCP16324Z     2K7 Ω 1/16W     C8, 148, 64, 65, 66, 66, C05047       R8, 25, 26, 17, 19, 12, 129, 274     RCP16324Z     3K8 Ω 1/16W     C55, 262, 226, 230, 257, 282, 253, 257, 282, 252, 253, 257, 282, 252, 253, 257, 282,					
$ \begin{array}{ccccc} Ref & (4,67,72,79,80), RCP1610242 & IK & 0 1/16W \\ SR & (16,118,122,223), RCP1610242 & IK & 0 1/16W \\ C281 & CC05010 \\ C282 & CC05010 \\ C282 & CC05012 \\ C282 & CC05012 \\ C282 & CC05022 \\ C283 & CC05022 \\ C281 & C200 & CC05023 \\ C216,210 & C05023 & CC05023 \\ C214,232,189,232,295,303, & VC & CC05023 \\ C214,232,189,232,295,303, & VC & CC05010 \\ C384 & (79, 97,132,207), RCP1615242 & IK2 & 0 1/16W \\ R20,27,71,73,75,114, RCP1622242 & 2K2 & 0 1/16W \\ R22,59,60,66,110, RCP163242 & IK3 & 0 1/16W \\ R22,59,80,250,280,120, RCP163242 & 3K3 & 0 1/16W \\ R25,250,270 & RCP163242 & 3K3 & 0 1/16W \\ R25,250,270 & RCP163242 & 3K3 & 0 1/16W \\ R25,250,270 & RCP163242 & 3K3 & 0 1/16W \\ R25,250,270 & RCP163242 & 3K3 & 0 1/16W \\ R25,250,270 & RCP163242 & 3K3 & 0 1/16W \\ R25,250,270 & RCP163242 & 3K3 & 0 1/16W \\ R18,22,58,60,66,110, RCP163242 & 3K3 & 0 1/16W \\ R18,20,275 & RCP163242 & 3K9 & 0 1/16W \\ R25,270 & RCP163242 & 3K9 & 0 1/16W \\ R29,275 & RCP1662242 & 6K8 & 0 1/16W \\ R159,161,175,181,202 & C200 & CC05007 \\ R19,100,187,208 & RCP162342 & 12K & 0 1/16W \\ R159,161,175,181,202 & C200 & CC10010 \\ R17,130,2127,276,296 & C200 & CC10010 \\ R17,130,2127,276,296 & C200 & CC10010 \\ R17,130,2128,218,227 & 22K & 0 1/16W \\ R19,109,187,208 & RCP162342 & 22K & 0 1/16W \\ R29,551,70,172,176 & RCP1663242 & 6KK & 1/16W \\ R19,551,105,118,218,218, 227 & 220K & 0 \\ R17,1105,107 & RCP1663242 & 22K & 0 1/16W \\ R19,551,10,172,176 & RCP1664742 & 20K & 0 \\ R17,123 & RCP1602442 & 20K & 0 \\ R17,123 & RCP1602442 & 20K & 0 \\ R19,551,10,172,176 & RCP164742 & 47K & 1/16W \\ R19,3 & RCP161542 & 1/16W \\ R106 & RCP1610542 & 1/16W \\ R116 & RCP1610542 & 1/16W \\ R19,3 & RCP1622442 & 20K & 0 \\ R116 & RCP1610542 & 1/16W \\ R19,3 & RCP1602442 & 20K & 0 \\ R116 & RCP1610542$					
$ \begin{array}{ccccc} Ref & (4,67,72,79,80), RCP1610242 & IK & 0 1/16W \\ SR & (16,118,122,223), RCP1610242 & IK & 0 1/16W \\ C281 & CC05010 \\ C282 & CC05010 \\ C282 & CC05012 \\ C282 & CC05012 \\ C282 & CC05022 \\ C283 & CC05022 \\ C281 & C200 & CC05023 \\ C216,210 & C05023 & CC05023 \\ C214,232,189,232,295,303, & VC & CC05023 \\ C214,232,189,232,295,303, & VC & CC05010 \\ C384 & (79, 97,132,207), RCP1615242 & IK2 & 0 1/16W \\ R20,27,71,73,75,114, RCP1622242 & 2K2 & 0 1/16W \\ R22,59,60,66,110, RCP163242 & IK3 & 0 1/16W \\ R22,59,80,250,280,120, RCP163242 & 3K3 & 0 1/16W \\ R25,250,270 & RCP163242 & 3K3 & 0 1/16W \\ R25,250,270 & RCP163242 & 3K3 & 0 1/16W \\ R25,250,270 & RCP163242 & 3K3 & 0 1/16W \\ R25,250,270 & RCP163242 & 3K3 & 0 1/16W \\ R25,250,270 & RCP163242 & 3K3 & 0 1/16W \\ R25,250,270 & RCP163242 & 3K3 & 0 1/16W \\ R18,22,58,60,66,110, RCP163242 & 3K3 & 0 1/16W \\ R18,20,275 & RCP163242 & 3K9 & 0 1/16W \\ R25,270 & RCP163242 & 3K9 & 0 1/16W \\ R29,275 & RCP1662242 & 6K8 & 0 1/16W \\ R159,161,175,181,202 & C200 & CC05007 \\ R19,100,187,208 & RCP162342 & 12K & 0 1/16W \\ R159,161,175,181,202 & C200 & CC10010 \\ R17,130,2127,276,296 & C200 & CC10010 \\ R17,130,2127,276,296 & C200 & CC10010 \\ R17,130,2128,218,227 & 22K & 0 1/16W \\ R19,109,187,208 & RCP162342 & 22K & 0 1/16W \\ R29,551,70,172,176 & RCP1663242 & 6KK & 1/16W \\ R19,551,105,118,218,218, 227 & 220K & 0 \\ R17,1105,107 & RCP1663242 & 22K & 0 1/16W \\ R19,551,10,172,176 & RCP1664742 & 20K & 0 \\ R17,123 & RCP1602442 & 20K & 0 \\ R17,123 & RCP1602442 & 20K & 0 \\ R19,551,10,172,176 & RCP164742 & 47K & 1/16W \\ R19,3 & RCP161542 & 1/16W \\ R106 & RCP1610542 & 1/16W \\ R116 & RCP1610542 & 1/16W \\ R19,3 & RCP1622442 & 20K & 0 \\ R116 & RCP1610542 & 1/16W \\ R19,3 & RCP1602442 & 20K & 0 \\ R116 & RCP1610542$	R4,50,89,94,209	RCP166814Z	680 Ω 1/16W	C130	CC05020
R62     c4, 67, 72, 79, 80, RCP1610242     IK Ω 1/16W     C281     CC05010       136-138, 123, 270, 271,     C282     CC05018       136-138, 123, 270, 271,     C282     CC05027       157, 252, 160, 164, 166,     C86     CC05027       237, 231, 232, 285, 236,     C216, 210     CC05047       237, 231, 232, 245, 303,     RCP1612242     IK2 Ω 1/16W     C7, 47, 50, 74, 95, 99,     CC05010       230     RCP1612242     IK2 Ω 1/16W     C7, 47, 50, 74, 95, 99,     CC05010       232, 247, 251, 255, 273     RCP1612242     IK2 Ω 1/16W     C81, 173, 193, 206, 207,     CC05010       232, 247, 252, 258, 121, 153     RCP1627242     2K7 Ω 1/16W     C5, 18, 48, 64, 65, 66,     CC05047       R18, 22, 56, 06, 66, 110,     RCP163242     3K3 Ω 1/16W     C37, 247, 92, 92, 302, 304,     215, 236, 20, 265,       R3, 25, 28, 121, 153     RCP163242     3K3 Ω 1/16W     C5, 18, 48, 64, 65, 66, 66,     CC05047       R3, 22, 26, 40, 265, 93     RCP163242     3K4 Ω 1/16W     C32, 242, 45, 46, 162, 163     CC05047       R14, 40, 41, 70, 82, 312     RCP165242     SK6 Ω 1/16W     C32, 42, 45, 46, 162, 163 <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
98, 116, 118, 122, 223,   C282   CC05018.     136-138, 123, 270, 271,   C220   CC05027.     115, 252, 160, 164, 166,   C66   CC05027.     127, 129, 166, 205, 206,   C85, 201, 203   CC05018.     237, 291, 292, 295, 303,   C16, 210   CC050207.     237, 291, 292, 295, 303,   C116, 210   CC05010.     230   RCP1615242   1K5 Ω 1/16W   C7, 47, 50, 74, 95, 99, CC05010.     231, 247, 251, 255, 273   RCP1618242   1K8 Ω 1/16W   C29, 77, 73, 93, 206, 207, CC05010.     232, 247, 251, 255, 273   RCP1618242   2K8 Ω 1/16W   C29, 727, 292, 302, 304, 215, 235, 236, 230, 2304, 215, 236, 270     230, 259   RCP1627242   2K7 Ω 1/16W   C5, 18, 48, 64, 65, 66, C6, CC05047.     783, 52, 28, 121, 153   RCP1632427   3K9 Ω 1/16W   C29, 272, 292, 302, 304, 215, 235, 255, 255, 255, 255, 255, 255, 25					
136-136,123,270,271,     C220     CC05022       115,252,160,164,166,     C66     CC05027       157,179,186,205,206,     C65,201,203     CC05039       237,231,222,185,238,240,     C16,210     CC05027       320     RCP161224Z     1K2 Ω 1/16W     C7,47,50,74,95,99,     CC050107       S32,47,251,255,273     IB3,244,246,245     CC05027     CC050107       R226     RCP161824Z     1K8 Ω 1/16W     C81,173,193,206,207,     CC050107       S33,247,251,255,273     IB3,244,246,245     CC050107     C215,210,207,07,002,014,     C01,173,193,206,207,     CC050107       S33,259     RCP161824Z     1K8 Ω 1/16W     C5,18,42,466,245     CC05047     C128,171,124,9250,256,     CC05047       S3,25,28,121,153     RCP16324Z     3K9 Ω 1/16W     C5,18,448,46,45,48,     CC05047       S28,270,286,06,66,110,     RCP16324Z     3K9 Ω 1/16W     C32,42,45,46,162,163     CC05047       S33,92,264,265,93     RCP16524Z     5K6 Ω 1/16W     C32,42,45,46,162,163     CC05047       R14,40,41,70,82,312     RCP16524Z     5K6 Ω 1/16W     C32,42,45,46,162,163     CC05022		1(011010242	110 32 1/100		
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167, 179, 186, 205, 206, 201, 203   CC05039     214, 232, 189, 238, 240, 201, 203   CC05047, 200, 200, 200, 200, 200, 200, 200, 20					
214 (232) 189 (236) (240)   CC05047     237, 291, 292, 295, 303,   CC16, 210   CC05047     320   RCP1612242   1K2 Ω 1/16W   C7, 47, 50, 74, 95, 99   CC05010     323, 291, 292, 295, 203,   RCP1612242   1K2 Ω 1/16W   C7, 47, 50, 74, 95, 99   CC05010     323, 247, 251, 255, 273   RCP1618242   1K8 Ω 1/16W   C81, 73, 193, 206, 207, CC05010   CC05047     R20, 27, 71, 73, 75, 114,   RCP1622242   2K2 Ω 1/16W   C13, 211, 249, 250, 256, 204, 255, 273   CC05047     R313, 259   RCP163242   3K3 Ω 1/16W   C5, 18, 48, 64, 65, 68, CC05047   CC05047     R18, 22, 55, 66, 66, 110,   RCP1643242   3K3 Ω 1/16W   C32, 42, 45, 46, 162, 163   CC05047     R18, 22, 55, 66, 56, 510,   RCP1643242   4K7 Ω 1/16W   C32, 42, 45, 46, 162, 163   CC05047     R14, 40, 41, 70, 82, 312   RCP1663242   5K6 Ω 1/16W   C32, 42, 45, 46, 162, 163   CC05047     R14, 40, 41, 70, 82, 312   RCP1663242   5K Ω 1/16W   C32, 42, 45, 46, 162, 163   CC05047     R14, 40, 41, 70, 82, 312   RCP1663242   16K Ω 1/16W   C32, 42, 45, 46, 162, 163   CC05047     R14, 40, 41, 70, 82, 312   RCP1612342   12K Ω 1/16W <td></td> <td></td> <td></td> <td></td> <td></td>					
227,291,292,295,303,   VC1   CV05020     320   C199   CD30056     888,192   RCP161224Z   1K2 Ω 1/16W   C7,47,50,74,95,99,   CC05010     R54,87,251,255,273   183,244,246,245   183,244,246,245   CC05010     R226   RCP161824Z   1K8 Ω 1/16W   C81,173,193,206,207,   CC05010     R3,25,28,121,153   RCP16224Z   2K2 Ω 1/16W   C5,18,48,64,65,68,   CC05047     R3,25,28,66,110,   RCP16324Z   3K3 Ω 1/16W   C5,18,48,64,65,68,   CC05047     R18,22,258,60,66,61,10,   RCP16324Z   3K3 Ω 1/16W   240,251,252,253,257,   R66,84,131,165,190,   RCP16524Z   3K6 Ω 1/16W   220   C000   C010010     R3,92,264,265,93   RCP165624Z   6K6 Ω 1/16W   ,221   CC05022   C010010   C199,713,227,276,26,272,272,272,272,272,272,272,	167,179,186,205,206,			C85,201,203	CC050393
320     C199     CD30056       R88,192     RCP161224Z     1K2 Ω     1/16W     C7,47,50,74,95,94     CC050101       R88,4,87,97,132,207,     RCP161524Z     1K5 Ω     1/16W     100,118,120,110,174,       R23,247,251,255,273     RCP161824Z     1K8 Ω     1/16W     C81,173,193,206,207,     CC050101       R20,27,71,73,75,114,     RCP161824Z     1K8 Ω     1/16W     C81,173,193,206,207,     CC050101       R313,259     RCP161824Z     2K2 Ω     1/16W     C31,73,193,206,207,     CC050471       R8,25,57     RCP163324Z     2K7 Ω     1/16W     C5,18,48,64,65,68,     CC050471       R8,25,57     RCP163924Z     3K9 Ω     1/16W     C25,22,253,257,     RC9163924Z     3K9 Ω     1/16W     C32,42,45,46,162,163     CC050471       R8,39,2,264,265,93     RCP16524Z     5K6 Ω     1/16W     C31,51,57,58,60,63,     CC05022     C23,6,9,15,16,17,19     CC05022       R1,40,41,70,82,312     RCP161234Z     12K Ω     1/16W     C131,51,57,58,60,63,     CC100101       R1,31,17,518,12,02     C200     CC100102     C23,6,9,15,16,17	214,232,189,238,240,			C216,210	CC05047
$ \begin{array}{c} 220 \\ 221 \\ 222 \\ 223 \\ 224 \\ 224 \\ 225 \\ 227 \\ 224 \\ 225 \\ 226 \\ 225 \\ 225 \\ 226 \\ 225 \\ 226 $	237,291,292,295,303,			VC1	CV05020
$ \begin{array}{llllllllllllllllllllllllllllllllllll$				C199	CD30056
$ \begin{array}{llllllllllllllllllllllllllllllllllll$		DCD1612247	1K2 0 1/16W		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					0000010.
$ \begin{array}{c} \mathbb{R} 226 & \mathbb{R} \mathbb{CP} 1618242 & \mathbb{1} \mathbb{KB} \ \Omega \ 1/16W & \mathbb{C81}, 173, 193, 206, 207, \mathbb{CC} 05010 \\ \mathbb{R} 20, 27, 71, 73, 75, 114, \mathbb{R} \mathbb{R} \mathbb{CP} 1622242 & 2\mathbb{K} 2 \ \Omega \ 1/16W & \mathbb{C31}, 211, 249, 250, 256, 213, 215, 236, 270 \\ \mathbb{R} 313, 259 & \mathbb{R} 25, 28, 121, 153 & \mathbb{R} \mathbb{CP} 1627242 & 2\mathbb{K} 7 \ \Omega \ 1/16W & \mathbb{C5}, 18, 48, 64, 65, 68, \mathbb{C} \mathbb{C} 05047 \\ \mathbb{R} 18, 22, 58, 60, 66, 110 & \mathbb{R} \mathbb{CP} 1632242 & 3\mathbb{K} 3 \ \Omega \ 1/16W & \mathbb{C4} 0, 251, 252, 253, 257, \mathbb{R} 26, 84, 131, 165, 190 & \mathbb{R} \mathbb{CP} 1632242 & 3\mathbb{K} 9 \ \Omega \ 1/16W & 258, 260, 261, 263, 266, 20 \\ \mathbb{R} 25, 257 & \mathbb{R} \mathbb{CP} 1632242 & 5\mathbb{K} 6 \ \Omega \ 1/16W & \mathbb{C3} 2, 42, 45, 46, 162, 163 & \mathbb{CC} 05047 \\ \mathbb{R} 3, 92, 264, 265, 93 & \mathbb{R} \mathbb{CP} 1632424 & 4\mathbb{K} 7 \ \Omega \ 1/16W & \mathbb{C3} 2, 42, 45, 46, 162, 163 & \mathbb{CC} 05047 \\ \mathbb{R} 1, 4, 40, 41, 70, 62, 312 & \mathbb{R} \mathbb{CP} 1662424 & 6\mathbb{K} 6 \ 1/16W & \mathbb{C155} & \mathbb{C} \mathbb{C} \mathbb{C} 05022 \\ \mathbb{R} 1, 13, 1, 75, 6, 65, 68, 68 & \mathbb{R} \mathbb{CP} 1610342 & 10\mathbb{K} \ \Omega \ 1/16W & \mathbb{C155} & \mathbb{C} \mathbb{C} \mathbb{C} 05022 \\ \mathbb{R} 1, 13, 1, 75, 272, 726, 296 & \mathbb{C} 2, 276, 296 & \mathbb{C} 2, 276 & \mathbb{C} 2, 26, 276 & \mathbb{C} 2, 276 & \mathbb{C} 2, 276 & \mathbb{C} 2, 276 & \mathbb{C} 2$		RCP1013242	IV2 75 I\I0M		
R20, 27, 71, 73, 75, 114, 134, 162, 197, 279, 283, 313, 259RCP16222422K2 $Ω$ 1/16W213, 211, 249, 250, 256, 259, 272, 292, 302, 304, 215, 236, 270R9, 25, 28, 121, 153RCP1632422K7 $Ω$ 1/16WC5, 18, 48, 64, 65, 68, CC05047. T, 87, 92, 96, 102, 105, 128, 171, 191, 219, 274RCP16332423K3 $Ω$ 1/16WC5, 18, 48, 64, 65, 68, CC05047. T, 87, 92, 96, 102, 105, 128, 171, 191, 219, 274RCP16332423K3 $Ω$ 1/16W240, 251, 252, 253, 257, 20RCP1647242KT $Ω$ 1/16W258, 260, 261, 263, 266, 20195, 196, 252RCP16562425K6 $Ω$ 1/16WC32, 42, 45, 46, 162, 163CC05047. CC05022.R1, 13, 17, 56, 65, 68, 86RCP161034210K $Ω$ 1/16WC32, 42, 45, 46, 162, 163CC05047. CC10010.R30, 92, 264, 265, 93RCP16622428K2 $Ω$ 1/16WC155CC05022.R1, 13, 17, 56, 65, 68, 86RCP161034210K $Ω$ 1/16WC155CC05010.R1, 75, 71, 81, 202C200CC10010.C200CC10010.210, 216, 272, 276, 296C28, 209, 9311RCP162234222K $Ω$ 1/16W, 131, 51, 57, 58, 60, 63, RR1, 80, 199, 187, 208RCP162234222K $Ω$ 1/16W, 127, 133, 284, 134, 135RR46RCP16334233K $Ω$ 1/16W, 205, 262, 278, 217, 219RR7.29, 61, 63, 96, 126, RCP164734247K $Ω$ 1/16W, 229, 230, 232, 285, 247, 269, 271, 305R21, 105, 107RCP168234282K $Ω$ 1/16WC154C7016122R47R15, 115, 118, 128, 127, 128, 128, 127, 129C72, 237C701610.R49, 55, 1					
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	R226	RCP161824Z	1K8 Ω 1/16W		CC050104
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	R20,27,71,73,75,114,	RCP162224Z	2K2 Ω 1/16W	213,211,249,250,256,	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	134,162,197,279,283,			259,272,292,302,304,	
$ \begin{array}{llllllllllllllllllllllllllllllllllll$					
$ \begin{array}{llllllllllllllllllllllllllllllllllll$		BCP1627247	2K7 0 1/16W		CC05047
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					0000017
R22,57RCP163924Z3F9 Ω1/16W240,251,252,253,257, 250,261,263,266, 20R26,84,131,165,190,RCP164724Z4K7 Ω1/16W250,261,263,266, 20R33,92,264,265,93RCP165624Z5K6 Ω1/16W,221R90,275RCP168224Z8K2 Ω1/16W(155CC05022R1,13,17,56,65,68,86RCP161034Z10K Ω1/16W,131,51,57,58,60,63, (159,161,175,181,202)C200CC100103210,216,272,276,296		RCF1033242	2K2 25 1/10M		
R2684,131,165,190, 195,196,252RCP164724Z4K7 $Ω$ 1/16W258,260,261,263,266, 20R33,92,264,265,93RCP165624Z5K6 $Ω$ 1/16WC32,42,45,46,162,163CC050477R14,40,41,70,82,312RCP166824Z6K8 $Ω$ 1/16W,221CC05022R0,275RCP168224Z8K2 $Ω$ 1/16W,221CC05022x1,13,17,56,65,68,86RCP161034Z10K $Ω$ 1/16WC200CC100103,297,173,227-231RCP161234Z12K $Ω$ 1/16W,131,51,57,58,60,63,R180RCP161234Z22K $Ω$ 1/16W,133,284,134,135R178,310RCP161234Z22K $Ω$ 1/16W,127,133,284,134,135SSSSR2,262,309,311RCP162334Z33K $Ω$ 1/16W,127,133,284,134,135SS <td></td> <td></td> <td></td> <td></td> <td></td>					
195, 196, 25220R33, 92, 264, 265, 93RCP165624Z5K6 Ω 1/16WC32, 42, 45, 46, 162, 163CC050473R44, 04, 14, 70, 82, 312RCP166824Z6K8 Ω 1/16W, 221R90, 275RCP168224Z8K2 Ω 1/16WC155CC050223R1, 13, 17, 56, 65, 68, 86RCP161034Z10K Ω 1/16WC200CC100103, 159, 161, 175, 181, 202, 131, 51, 57, 58, 60, 63,RCP161534Z12K Ω 1/16W, 131, 51, 57, 58, 60, 63,R178, 310RCP161534Z12K Ω 1/16W, 131, 51, 57, 58, 60, 63,RCP161334Z33K Ω 1/16W, 127, 133, 284, 134, 135R180RCP16334Z33K Ω 1/16W, 127, 133, 284, 134, 135RCP16334Z33K Ω 1/16W, 205, 262, 278, 217, 219R7, 29, 61, 63, 96, 126,RCP164734Z47K Ω 1/16W, 205, 262, 278, 217, 219RCP168234Z82K Ω 1/16W, 298, 254, 255, 265, 267R24RCP166834Z68K Ω 1/16WC97, 149CT01610-R45RCP166834Z68K Ω 1/16WC97, 149CT016122-R12, 42, 43, 44, 51, 53,RCP161044Z100K ΩC98, 180, 299, 300CT01622-104, 108, 112, 182, 184,1/16WC78, 184CM050103-R49, 55, 170, 172, 176RCP162244Z220K ΩC176CM050103-R48RCP168244Z820K ΩC12CM05022-1/16WC34, 20CM050103-C176CM050473-R12, 111, 183RCP161054Z1M Ω 1/16WC167, 75, 153, 157, 170,CE050101R14, 111, 183RCP161054Z1M Ω 1/16WC67, 75, 153, 157,	R52,57	RCP163924Z			
R33,92,264,265,93RCP16562425K6 Ω 1/16WC32,42,45,46,162,163CC050473R14,40,41,70,82,312RCP16682426K8 Ω 1/16W,221R90,275RCP16822428K2 Ω 1/16WC155CC05023R1,13,17,56,65,68,86RCP161034210K Ω 1/16WC155CC050103,159,161,175,181,202.200CC100101C200CC100101,297,173,227-231RCP161234212K Ω 1/16W,131,51,57,58,60,63,R180RCP161234212K Ω 1/16W,131,51,57,58,60,63,R180RCP161234212K Ω 1/16W,127,133,284,134,135R2,262,309,311RCP163334233K Ω 1/16W,138,142,145,146,189R46RCP16334239K Ω 1/16W,205,262,78,217,219R7,29,61,63,96,126,RCP164734247K Ω 1/16W,229,230,232,285,247150,157,185,218,222,.224.269,271,305.298,254,255,265,267.298,254,255,265,267.298,254,255,265,267R21,105,107RCP168234268K Ω 1/16WC154CT016104R45RCP168234282K Ω 1/16WC154CT016122104,108,112,182,184,./116WC40,178,296CM050101225,278,221	R26 ,84,131,165,190,	RCP164724Z	4K7 Ω 1/16W	258,260,261,263,266,	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	195,196,252			20	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	R83,92,264,265,93	RCP165624Z	5K6 Ω 1/16W	C32,42,45,46,162,163	CC050472
R90,275RCP168224Z8K2 Ω 1/16WC155CC05022R1,13,17,56,65,68,86RCP161034Z10K Ω 1/16WC105CC05022,159,161,175,181,20210K Ω 1/16WC200CC10010,210,216,272,276,296C2,3,6,9,15,16,17,19CC05010,297,173,227-231RCP161234Z12K Ω 1/16W,131,51,57,58,60,63,R180RCP161534Z15K Ω 1/16W,127,133,284,134,135RC926234ZR180RCP16334Z33K Ω 1/16W,127,133,284,134,135RC926234ZR2,262,309,311RCP16334Z39K Ω 1/16W,138,142,145,146,189R46RCP163934Z39K Ω 1/16W,229,230,232,285,247r50,157,185,218,222,.298,254,255,265,267.298,254,255,265,267R21,105,107RCP166834Z68K Ω 1/16WC97,149CT01610.R45RCP168234Z82K Ω 1/16WC154CT01622.R21,105,107RCP166834Z82K Ω 1/16WC154CT01622.R21,105,107RCP166834Z82K Ω 1/16WC154CT01622.R47,117,135,139,194RCP162244Z220K ΩC77,237CM05010.R49,55,170,172,176RCP164744Z270K ΩC39,185,41CM05022.R48RCP168244Z820K ΩC12CM05047.R48RCP168244Z820K ΩC12CM05047.R193RCP161654ZIM Ω 1/16WC10C24,20CM05047.R193RCP161654ZIM Ω 1/16WC10C26,077,75,153,157,170,CE05010.R124RCP161654ZIM Ω 1/16WC16C10 </td <td></td> <td>RCP1668247</td> <td>6K8 Q 1/16W</td> <td></td> <td></td>		RCP1668247	6K8 Q 1/16W		
R1,13,17,56,65,68,86RCP161034Z10K Ω 1/16WC200CC10010,159,161,175,181,202,210,216,272,276,296C2,3,6,9,15,16,17,19CC050103,297,173,227-231RCP161234Z12K Ω 1/16W,131,51,57,58,60,63,R178,310RCP161534Z15K Ω 1/16W,131,51,57,58,60,63,R191,109,187,208RCP16234Z22K Ω 1/16W,127,133,284,134,135R2,262,309,311RCP163334Z33K Ω 1/16W,138,142,145,146,189R46RCP163934Z39K Ω 1/16W,205,262,278,217,219R7,29,61,63,96,126,RCP164734Z47K Ω 1/16W,298,254,255,265,267,269,271,305RCP168234Z82K Ω 1/16WC154R21,105,107RCP166834Z68K Ω 1/16WC154CT01622R47,117,135,139,194RCP162244Z220K Ω1/16WC14CM05010R49,55,170,172,176RCP164744Z270K ΩC39,185,41CM05010R48RCP161054Z1/16WC176CM05010R48RCP161054ZMΩ 1/16WC10CM050477R193RCP161054ZMΩ 1/16WC67,75,153,157,170,CE05010R124RCP161054ZMΩ 1/16WC10C26,027,198R244RCP121514Z150 Ω 1/2WC159,214,242CE05022					CC05022
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				0100	CC03022.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		RCP1610342	IUK \$2 1/16W		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				C200	CC100103
R178,310RCP161234Z $12K \Omega 1/16W$ $,131,51,57,58,60,63,$ R180RCP161534Z $15K \Omega 1/16W$ $66,69,73,109,114,161$ R91,109,187,208RCP16234Z $22K \Omega 1/16W$ $,127,133,284,134,135$ R2,262,309,311RCP16334Z $33K \Omega 1/16W$ $,122,133,284,134,135$ R46RCP163934Z $39K \Omega 1/16W$ $,125,262,278,217,219$ R7,29,61,63,96,126,RCP164734Z $47K \Omega 1/16W$ $,229,230,232,285,247$ $,269,271,305$ $,269,271,305$ $,269,271,305$ R21,105,107RCP166834Z $68K \Omega 1/16W$ C154CT016102R45RCP168234Z $82K \Omega 1/16W$ C154CT01622R12,42,43,44,51,53,RCP161044Z $100K \Omega$ C98,180,299,300CT01622R47,117,135,139,194RCP162244Z $220K \Omega$ $1/16W$ C78,184CM050101R49,55,170,172,176RCP164744Z $270K \Omega$ C39,185,41CM05022R15,111,183RCP168244Z $820K \Omega$ C12CM050473R48RCP168244Z $820K \Omega$ C12CM050473R193RCP161054ZIM $S \Omega 1/16W$ C67,75,153,157,170, CE050103R193RCP161054ZIM $S \Omega 1/16W$ C67,75,153,157,170, CE050103R193RCP161064ZIM $S \Omega 1/16W$ C67,75,153,157,170, CE050103R124RCP161064ZIM $S \Omega 1/16W$ C10CE050477R124RCP161064ZIM $S \Omega 1/16W$ C16,75,153,157,170, CE050103R124RCP161064ZIM $S \Omega 1/16W$ C16,75,153,157,170, CE050103	,210,216,272,276,296				
R178,310RCP161234Z $12K \ \Omega \ 1/16W$ $,131,51,57,58,60,63,$ R180RCP161534Z $15K \ \Omega \ 1/16W$ $,69,73,109,114,161$ R91,109,187,208RCP16234Z $22K \ \Omega \ 1/16W$ $,127,133,284,134,135$ R2,262,309,311RCP163334Z $33K \ \Omega \ 1/16W$ $,138,142,145,146,189$ R46RCP163934Z $39K \ \Omega \ 1/16W$ $,205,262,278,217,219$ R7,29,61,63,96,126,RCP164734Z $47K \ \Omega \ 1/16W$ $,229,230,232,285,247$ $,269,271,305$ $,269,271,305$ $,269,271,305$ R21,105,107RCP166834Z $68K \ \Omega \ 1/16W$ $C154$ CT01610R45RCP168234Z $82K \ \Omega \ 1/16W$ $C154$ CT01622R12,42,43,44,51,53,RCP161044Z $100K \ \Omega$ $C98,180,299,300$ CT01622R47,117,135,139,194RCP162244Z $220K \ \Omega$ $(77,237)$ CM050101R49,55,170,172,176RCP164744Z $270K \ \Omega$ $C39,185,41$ CM050102R15,111,183RCP168244Z $820K \ \Omega$ $C12$ CM050473R48RCP168244Z $820K \ \Omega$ $C12$ CM050473R193RCP161054Z $1M \ \Omega \ 1/16W$ C14C10CE050477R193RCP161054Z $1M \ \Omega \ 1/16W$ C67,75,153,157,170,CE050101R193RCP161054Z $1M \ \Omega \ 1/16W$ C67,75,153,157,170,R124RCP1610642 $1M \ \Omega \ 1/16W$ C10CE050477R124RCP161064Z $1M \ \Omega \ 1/16W$ C12CM050223R124RCP161054Z $1M \ \Omega \ 1/16W$ C67,75,153,157,170,R	,297,173,227-231			C2,3,6,9,15,16,17,19	CC050103
R180RCP161534Z15K $\Omega$ 1/16W66,69,73,109,114,161R91,109,187,208RCP162234Z22K $\Omega$ 1/16W,127,133,284,134,135R2,262,309,311RCP163334Z33K $\Omega$ 1/16W,138,142,145,146,189R46RCP163934Z39K $\Omega$ 1/16W,205,262,278,217,219R7,29,61,63,96,126,RCP164734Z47K $\Omega$ 1/16W,229,230,232,285,247150,157,185,218,222,,298,254,255,265,267,298,254,255,265,267224,299,271,305CT01610R45RCP168234Z82K $\Omega$ 1/16WC154R45RCP168234Z82K $\Omega$ 1/16WC1622R45RCP161044Z100K $\Omega$ C98,180,299,300CT01622104,108,112,182,184,1/16WC40,178,296CM05010225,278,2211/16WC78,184CM050102R47,117,135,139,194RCP162244Z270K $\Omega$ C39,185,41CM050221/16W1/16WC176CM05047R49,55,170,172,176RCP164744Z470K $\Omega$ 1/16WC34,20CM05047R48RCP168244Z820K $\Omega$ C12CM05047R15,111,183RCP161054Z1M $\Omega$ 1/16WC67,75,153,157,170, CE05010R193RCP161554Z1M5 $\Omega$ 1/16WC67,75,153,157,170, CE05010R124RCP161064Z1M $\Omega$ 1/16WC67,75,153,157,170, CE05010R124RCP161064Z1M $\Omega$ 1/16WC67,75,153,157,170, CE05010R244RCP121514Z150 $\Omega$ 1/2WC159,214,242CE05022 <td></td> <td>RCP1612347</td> <td>12K Q 1/16W</td> <td></td> <td></td>		RCP1612347	12K Q 1/16W		
R91,109,187,208RCP162234Z22K $\Omega$ 1/16W,127,133,284,134,135R2,262,309,311RCP163334Z33K $\Omega$ 1/16W,138,142,145,146,189R46RCP163934Z39K $\Omega$ 1/16W,205,262,278,217,219R7,29,61,63,96,126,RCP164734Z47K $\Omega$ 1/16W,229,230,232,285,247150,157,185,218,222,					
R2,262,309,311RCP163334Z33K $\Omega$ 1/16W,138,142,145,146,189R46RCP163934Z39K $\Omega$ 1/16W,205,262,278,217,219R7,29,61,63,96,126,RCP164734Z47K $\Omega$ 1/16W,299,230,232,285,247150,157,185,218,222,,269,271,305,269,271,305R21,105,107RCP16834Z68K $\Omega$ 1/16WC97,149CT01610-R45RCP168234Z82K $\Omega$ 1/16WC154CT01622-104,108,112,182,184,1/16WC40,178,296CM05010-225,278,22177,237CM05010-R49,55,170,172,176RCP164744Z270K $\Omega$ C39,185,41R49,55,170,172,176RCP164744Z470K $\Omega$ 1/16WC34,20R48RCP168244Z820K $\Omega$ C12CM050472R48RCP161054Z1M $\Omega$ 1/16WC67,75,153,157,170, CE05047-R193RCP161054Z1M $\Omega$ 1/16WC67,75,153,157,170, CE05010-R124RCP161064210M $\Omega$ 1/16WC67,75,153,157,170, CE05010-R244RCP121514Z150 $\Omega$ 1/2WC159,214,242CE05022-					
R46RCP163934Z39K $Ω$ 1/16W,205,262,278,217,219R7,29,61,63,96,126,RCP164734Z47K $Ω$ 1/16W,229,230,232,285,247150,157,185,218,222,,298,254,255,265,267,298,254,255,265,267224,299,230,232,285,247,269,271,305R21,105,107RCP166834Z68K $Ω$ 1/16WC97,149CT01610R45RCP168234Z82K $Ω$ 1/16WC154CT01622104,108,112,182,184,1/16WC40,178,296CM05010225,278,2211/16WC77,237CM05010R47,117,135,139,194RCP162244Z220K $Ω$ 1/16WC78,184CM05010R49,55,170,172,176RCP164744Z270K $Ω$ C39,185,41CM050221/16WC176CM050471/16WC176CM05047R48RCP168244Z820K $Ω$ C12CM05047R193RCP161054ZIM $Ω$ 1/16WC67,75,153,157,170, CE05010R193RCP161054ZIM $Ω$ 1/16WC67,75,153,157,170, CE05010R124RCP161064ZIM $Ω$ 1/16WC67,75,153,157,170, CE05010R244RCP121514Z150 $Ω$ 1/2WC159,214,242CE05022					
R729,61,63,96,126, RCP164734ZRCP164734Z47K $Ω$ 1/16W,229,230,232,285,247 ,288,254,255,265,267 ,269,271,305150,157,185,218,222, 					
150, 157, 185, 218, 222, 224, 298, 254, 255, 265, 267 , 269, 271, 305R21, 105, 107RCP166834Z68K $Ω$ 1/16WC97, 149CT016102R45RCP168234Z82K $Ω$ 1/16WC154CT01622R12, 42, 43, 44, 51, 53,RCP161044Z100K $Ω$ C98, 180, 299, 300CT01622104, 108, 112, 182, 184,1/16WC40, 178, 296CM05010225, 278, 221C77, 237CM050101R47, 117, 135, 139, 194RCP162244Z220K $Ω$ 1/16WC78, 184CM050102R49, 55, 170, 172, 176RCP164744Z270K $Ω$ R15, 111, 183RCP164744Z470K $Ω$ R48RCP168244Z820K $Ω$ C12R166RCP161054Z1M $Ω$ 1/16WR193RCP161054Z1M5 $Ω$ 1/16WR193RCP16154Z1M5 $Ω$ 1/16WR194RCP161054Z1M5 $Ω$ 1/16WR124RCP161054Z1M5 $Ω$ 1/16WR244RCP121514Z150 $Ω$ 1/2WC159, 214, 242CE05022					
224,269,271,305R21,105,107RCP16834Z68K $Ω$ 1/16WC97,149CT01610.R45RCP168234Z82K $Ω$ 1/16WC154CT01622.R12,42,43,44,51,53RCP161044Z100K $Ω$ C98,180,299,300CT01622.104,108,112,182,184,1/16WC40,178,296CM05010.225,278,221C77,237CM05010.R47,117,135,139,194RCP162244Z220K $Ω$ C78,184CM05010.R49,55,170,172,176RCP164744Z270K $Ω$ C39,185,41CM05022.R15,111,183RCP164744Z470K $Ω$ 1/16WC176CM05047.R48RCP168244Z820K $Ω$ C12CM05047.R193RCP161054ZIM $Ω$ 1/16WC67,75,153,157,170,CE05047.R124RCP161064Z10M $Ω$ 1/16W186,187,198C205022.R244RCP121514Z150 $Ω$ 1/2WC159,214,242CE05022.	R7 ,29,61,63,96,126,	RCP164734Z	47K Ω 1/16W		
R21,105,107RCP166834Z $68K \Omega 1/16W$ $C97,149$ $CT01610-RCP168234Z$ R45RCP168234Z $82K \Omega 1/16W$ $C154$ $CT01622$ R12,42,43,44,51,53RCP161044Z $100K \Omega$ $C98,180,299,300$ $CT01622$ 104,108,112,182,184, $1/16W$ $C40,178,296$ $CM05010$ 225,278,221 $C77,237$ $CM05010$ $C77,237$ R47,117,135,139,194RCP162244Z $220K \Omega$ $1/16W$ $C78,184$ $CM05010$ R49,55,170,172,176RCP164744Z $270K \Omega$ $C33,185,41$ $CM05022$ R15,111,183RCP164744Z $470K \Omega$ $1/16W$ $C176$ $CM050473$ R48RCP168244Z $820K \Omega$ $C12$ $CM050473$ R193RCP161054Z $1M5 \Omega 1/16W$ $C67,75,153,157,170,$ $CE050477$ R193RCP161054Z $1M5 \Omega 1/16W$ $C67,75,153,157,170,$ $CE05010$ R124RCP1610642 $10M \Omega 1/16W$ $186,187,198$ $R244$ $RCP121514Z$ $150 \Omega 1/2W$ $C159,214,242$ $CE05022$	150,157,185,218,222,			,298,254,255,265,267	
R21,105,107RCP166834Z $68K \Omega 1/16W$ $C97,149$ $CT01610-RCP168234Z$ R45RCP168234Z $82K \Omega 1/16W$ $C154$ $CT01622$ R12,42,43,44,51,53RCP161044Z $100K \Omega$ $C98,180,299,300$ $CT01622$ 104,108,112,182,184, $1/16W$ $C40,178,296$ $CM05010$ 225,278,221 $C77,237$ $CM05010$ $C77,237$ R47,117,135,139,194RCP162244Z $220K \Omega$ $1/16W$ $C78,184$ $CM05010$ R49,55,170,172,176RCP164744Z $270K \Omega$ $C33,185,41$ $CM05022$ R15,111,183RCP164744Z $470K \Omega$ $1/16W$ $C176$ $CM050473$ R48RCP168244Z $820K \Omega$ $C12$ $CM050473$ R193RCP161054Z $1M5 \Omega 1/16W$ $C67,75,153,157,170,$ $CE050477$ R193RCP161054Z $1M5 \Omega 1/16W$ $C67,75,153,157,170,$ $CE05010$ R124RCP1610642 $10M \Omega 1/16W$ $186,187,198$ $R244$ $RCP121514Z$ $150 \Omega 1/2W$ $C159,214,242$ $CE05022$					
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		BC P1668347	68K O 1/16W		CT01610
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		RCP161044Z			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	104,108,112,182,184,		1/16W	C40,178,296	CM050104
R47,117,135,139,194 RCP162244Z 220K Ω 1/16W C78,184 CM05010   R49,55,170,172,176 RCP164744Z 270K Ω C39,185,41 CM05022   1/16W C176 CM050472   R15,111,183 RCP164744Z 470K Ω   1/16W C34,20 CM050472   R48 RCP168244Z 820K Ω C12   R106 RCP161054Z 1M Ω 1/16W C10   R193 RCP161554Z 1M Ω 1/16W C67,75,153,157,170, CE05010   R124 RCP161064Z 10M Ω 1/16W 186,187,198   R244 RCP121514Z 150 Ω 1/2W C159,214,242 CE05022				C77,237	CM050102
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		RCP1622447	220K Q		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	,,,,,			C78,184	CMOSOIO
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	DAG 55 170 170 170	DCD1647447			
R15,111,183     RCP164744Z     470K Ω     1/16W     C34,20     CM05047       R48     RCP168244Z     820K Ω     C12     CM05022       1/16W      C10     CE05047       R106     RCP161054Z     1M Ω 1/16W     C10     CE05047       R193     RCP161554Z     1M Ω 1/16W     C10     CE05010       R124     RCP161064Z     10M Ω 1/16W     186,187,198     CE05022       R244     RCP121514Z     150 Ω 1/2W     C159,214,242     CE05022	кчэ, ээ, 170, 172, 176	КСР164/442			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				C176	CM05047
R48     RCP168244Z     820K Ω     C12     CM050223       1/16W     1/16W     C10     CE05047       R106     RCP161054Z     1M Ω 1/16W     C10     CE05047       R193     RCP161554Z     1M5 Ω 1/16W     C67 ,75,153,157,170, CE050103       R124     RCP161064Z     10M Ω 1/16W     186,187,198       R244     RCP121514Z     150 Ω 1/2W     C159,214,242     CE050223	R15,111,183	RCP164744Z	470Κ Ω		
R48     RCP168244Z     820K Ω     C12     CM050223       1/16W     1/16W     C10     CE05047       R106     RCP161054Z     1M Ω 1/16W     C10     CE05047       R193     RCP161554Z     1M5 Ω 1/16W     C67 ,75,153,157,170, CE050103       R124     RCP161064Z     10M Ω 1/16W     186,187,198       R244     RCP121514Z     150 Ω 1/2W     C159,214,242     CE050223				C34,20	CM05047
1/16W     C10     CE05047       R106     RCP161054Z     1M Ω 1/16W     C10     CE05047       R193     RCP161554Z     1M5 Ω 1/16W     C67 ,75,153,157,170,     CE050103       R124     RCP161064Z     10M Ω 1/16W     186,187,198     R244     RCP121514Z     150 Ω 1/2W     C159,214,242     CE050223	R48	RCP1682447			
RCP161054Z     1M Ω     1/16W     C10     CE05047       R193     RCP161554Z     1M5 Ω     1/16W     C67,75,153,157,170,     CE050105       R124     RCP161064Z     10M Ω     1/16W     186,187,198     CE050225       R244     RCP121514Z     150 Ω     1/2W     C159,214,242     CE050225					
R193     RCP161554Z     1M5 Ω     1/16W     C67     75,153,157,170     CE050103       R124     RCP161064Z     10M Ω     1/16W     186,187,198     2000000000000000000000000000000000000	P106	DCD1610547		C10	CE05047
R124     RCP161064Z     10M Ω     1/16W     186,187,198       R244     RCP121514Z     150 Ω     1/2W     C159,214,242     CE05022					
R244 RCP121514Z 150 Ω 1/2W C159,214,242 CE05022					CE050105
	R124	RCP161064Z	10M Ω 1/16W		
	R244	RCP121514Z	150 Ω 1/2W	C159,214,242	CE050225
	R239	RCP121034Z	10K Ω 1/2W	C103,182,38	CE050475

CC0500301L

CC0500501L

CC0501004L

3PF 50WV

5PF 50WV

10PF 50WV

18PF 50WV

27PF 50WV

33PF 50WV

82PF 50WV

100PF 50WV

150PF 50WV

270PF 50WV

330PF 50WV

560PF 50WV 0.5PF 50WV

1PF 50WV

5PF 50WV 15PF 50WV

18PF 50WV 22PF 50WV

33PF 50WV

47PF 50WV 68PF 50WV

100PF 50WV

150PF 50WV

39PF 50WV

180PF 50WV

39PF 50WV

150PF 50WV 20PF 50WV 68PF 50WV

100PF 50WV 180PF 50WV

220PF 50WV 270PF 50WV 390PF 50WV 470PF 50WV

T/C 20PF 5Q 560P 300WV

0.1UF 50WV

0.001UF

0.047UF 50WV

0.0047UF 50WV 0.022UF

50WV

0.01UF 100WV 0.01UF 50WV

0.1UF 16WV 0.22UF 16WV

2.2UF 16WV 0.1UF 50WV

0.022UF50WV

0.0047UF 50WV 0.047UF50WV

0.0022UF 50WV

1UF 50WV

0.47UF 50WV

2.2UF 50WV

4.7UF 50WV

0.001UF

50WV 0.01UF 50WV

50WV

C218

C1,49,108,147

C79

C13,21,22,44,82,115,	CE0251067Z	10UF 25WV	L35	ECSPG18001	0.8x3.5x7t
132,158,275,276,239 C80,181	0000000077	COLLE CENT	L38	ECRFZ10048	25UH 3.5x6x1.2
C33,37,144,175	CE0252267Z CE0254767Z	22UF 25WV 47UF 25WV	L39,41,13 VR7,12,16,18	ECBAD18526 RE10200041	1K VM6CK PV
C156,238,293,107	CE0161077Z	100UF 16WV	VR13,14	RE50200042	5K VM6CK PV
C152,179	CE0163377Z	330UF 16WV	VR1,2,6,17	RE10300031	10K VM6CK PV
C91 C243,248	CE0104777Z CE0251087Z	470UF 10WV 1000UF 25WV	VR9,15	RE10400043	100K VM6CK PV
C35	CEM254767Z	47UF 25WV	VR3,4	RE50400087	500K OHM
FL1	EFCFW455HT	CERAMIC	VR10	RE10100074	100 OHM
FL2	EFCFE107MX	FILTER CERAMIC	RA1	RCS0870028	RESISTOR ARRAY
1 22	2101210,111	FILTER	CA1	CCS0873000	CAPACITPR
FL3	EFX8106952	CRYTAL			ARRAY
X1	EYCAB10240	FILTER CRYSTAL	JP65,73,119,122 J9	WX01070707 WX01070703	JUMPER WIRE JUMPER WIRE
<u></u>	E101010210	FILTER	JP1-4,8,21,24,25,28,	WX01060605	JUMPER WIRE
Х3	EYCAA15360	CRYSTAL	33,34,45,49-52,55,56		
X4	EYBAE10697	FILTER CRYSTAL	,58 ,60,63,64,71,75- 77,79,80,82-84,88,95		
7.7 7	DIDADIO097	FILTER	,96,102,109,110,111,		
IC6	ENMA00612Z	I.C AN-612	114,117,118,121,129,		
IC3	ENRG871997	I.C RCI- 8719-97	132-137,139,145-150, 152-156,160x2,164,		
IC7	ENR004558Z	I.C BA4558	165,168,169,173,175,		
IC9	ENSM06130Z	I.C TDA6130	182,183,185,191,192,		
VC0 Q8,17,20	ENNOHIC070 T2SC01674L	IC070 2SC1674L	193,195-197,199,177 JP201 ,202,207, 211,	WX01070705	JUMPER WIRE
Q51	T2SC02314F	2SC2314F	214-218,220,221,227-	WX01070703	CONTER WIRE
Q23,52	T2SC01906Z	2SC1906	231,237,238,240,R19,		
Q36 Q24,43	TDTC0124ES TDTC0114ES	DTC124ES DTC114ES	R305 JP10,12,15,16,29,30-	WX01070710	JUMPER WIRE
Q60	TDTA0124ES	DTA124ES	32,35-38,40,43,44,	WH01070710	oonin bix wind
Q30,33,62	T2SA01282E	2SA1282AE	46-48,57,59,78,85-87		
Q1 ,2,9,10,11,21,22, 25,28,29,46,50,27	T2SC01675L	2SC1675L	,90,92-94,97-101,106 ,107,120,124-126,128		
Q3,4,5,7,13,14,15,16	T2SC00945P	2SC945P	,130,131,138,142,144		
,31,34,35,39,40, 42,			,151,158,163,166,176		
44,53,56,57 Q6,38	T2SA00733P	2SA733P	,178,179,187,189,190 ,194,198,200,203,206		
Q55	T2SA01869Z	2SA1869	,208-210,212,213,219		
Q18,19	FZZZJ00310Z	F.E.T. J310	,225,226,232-36,239,		
D3 ,4-7 ,9,10,20,21, 13-15 ,24-29 ,32-38,	ED1N04148Z	1N4148	241,242,L36 JP74	WX01070712	JUMPER WIRE
50-57,60-65, 68,69,			JP54,66,67,70,74	WX01070713	JUMPER WIRE
75-82,92,93,85-90,			JP180,188,89,127,172	WX01070714	JUMPER WIRE
102,104-108,141,150, 155,95-98,R269			JP6 ,11,17,140, 143, 204,223	WX01070716	JUMPER WIRE
D1,2,11,12,30,31	ED1N00060P	1N60P	J4,22,26,30,7,10,17,	EX07N48223	PCB CONN/S
D110	ED1N04003Z	1N4003	25		/ _
D109 D16,17	ED1N04007Z EDSS00053Z	1N4007 1SS53	J6,9,11,18 J28,21	EX07N48350 EX07N48490	PCB CONN/S PCB CONN/S
D59,72	EDMA00027W	MA27W-A	J5,20,3	EX07N48222	PCB CONN/S
D71,103,145,156	EDMA00027T	MA27T-A	J13	EX07N48331	PCB CONN/S
D49 D70	EDSV00251Z EDZD05519Z	SVC-251SPA 5.1V 0.5W	J14 J33	EX07N48224 EX07N48209	PCB CONN/S PCB CONN/S
D73	EDZD05759Z	7.5V 0.5W	J12	EX07N41227	PCB CONN/S
L2,3	ECIFT12002	7MC-7172ABW	SP	EX07N41330	PCB CONN/S
L6 L20,21,22	ECIFT12290 ECIFT12012	I.F.T. I.F.T.	TP2,3,5 TP7,8,9	EX07N48612 XZZZ90006Z	PCB CONN/S PCB STOPPER
L25	ECIFT12013	I.F.T.	J33	EX07N48967	WIRE CONN/H
L23,24	ECIFT12016	I.F.T.	J16	EX07N48041	WIRE CONN/H
L1,11 L44	ECIFT12252 ECIFT12255	I.F.T. I.F.T.	J17-J2(40Z) J4	EX07N49030 EX07N48917	WIRE CONN/H WIRE CONN/H
L9,10	ECIFT12256	I.F.T.	J14-J6(20Z)-J5-	EX07N48928	WIRE CONN/H
L12	ECIFT12257	I.F.T.	J8(40Z)	<b>BX07N40000</b>	MIDE CONN (H
L15,43 L40	ECIFT12258 ECIFT12262	I.F.T. I.F.T.	J6 J5	EX07N48920 EX07N48915	WIRE CONN/H WIRE CONN/H
L14	ECIFT12263	I.F.T.	J30,J10	EX07N48918	WIRE CONN/H
L5 17 42	ECIFT12253	I.F.T.	J7 J21,J22	EX07N49031	WIRE CONN/H
L7,42 L8	ECIFT12440 ECIFT12492	I.F.T. I.F.T.	JZI,JZZ JB-J6(40Z)-J11	EX07N48887 EX07N48968	WIRE CONN/H WIRE CONN/H
L48	ECCHK16096	470UH	J20-METER	EX07N48997	WIRE CONN/H
L503,504 L26,27,46	ECCHK16000 ECCHK16003	0.47UH 470UH	J4 (METER) -J16 (40Z) J1 (METER) -J4 (40Z)	EX07N48901 EX07N49002	WIRE CONN/H
L20,27,40 T1	ECCHK16003 ECCHK16004	4700H 1.1MH EI-19	J11-J8(20Z)-12(40Z)		WIRE CONN/H WIRE CONN/H
L33,37	ECCHK16070	22UH	J10		
L47 L16	ECCHK16176 ECCHK16246	4.7UH 2.4mm 22UH 2.4MM	J18 J3	EX07N49024 EX07N49073	WIRE CONN/H WIRE CONN/H
L28,30	ECSPG18003	0.8x6.5x7.5t	J 9	EX07N49073 EX07N49023	WIRE CONN/H WIRE CONN/H
L29	ECSPG18075	0.8x6x8.5t	J3(METER)-J9(20Z)	EX07N49005	WIRE CONN/H
L31	ECSPG18365	0.8x6.5x 7.5tmm	LAMP-J1(20Z) R233-J1(50Z)	EX07N48233 EX07N48896	WIRE CONN/H WIRE CONN/H
		, . J Cituli	1200 01 (002)	TV0.1NJ0020	WIND COMM/ H
		30			

IC8	ENTA07222A	TA7222AP
Q54	T2SB00754Y	2SB754Y
Q49	T2SC02166C	2SC2133C
Q47	T2SC01969C	2SC1969C
Q37	T2SA01869Z	2SA1869

## - UPDATES & CORRECTIONS -

Any updates or corrections to this Service Manual will be included in the Tech Support section of our website at www.GalaxyRadios.com.

