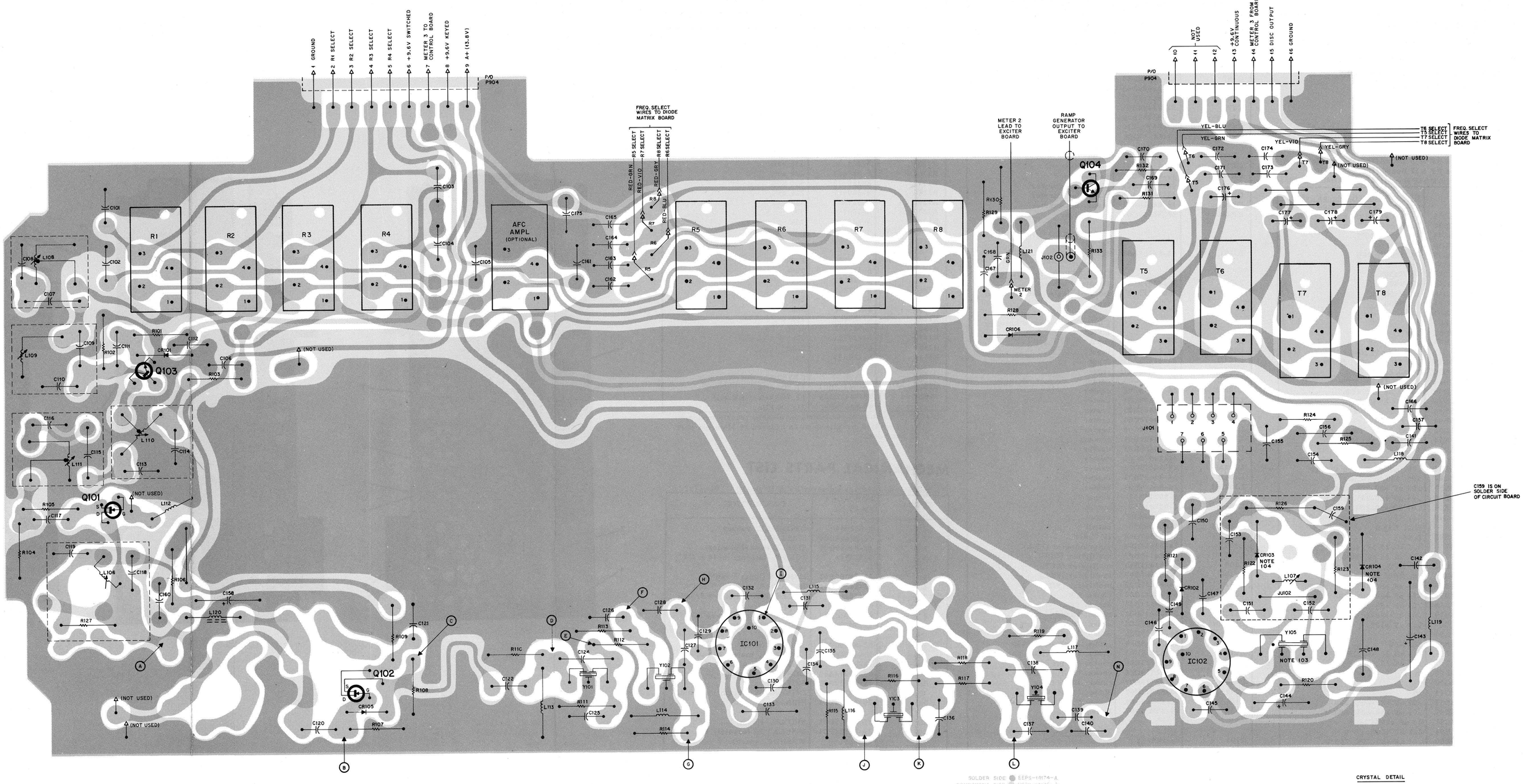
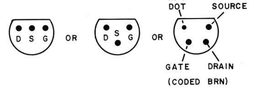


SHOWN FROM SOLDER SIDE

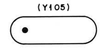
SOLDER SIDE EEPS-14174-A
COMPONENT SIDE EEPS-14175-A
OL EEPS-16560-B

ALL OTHERS

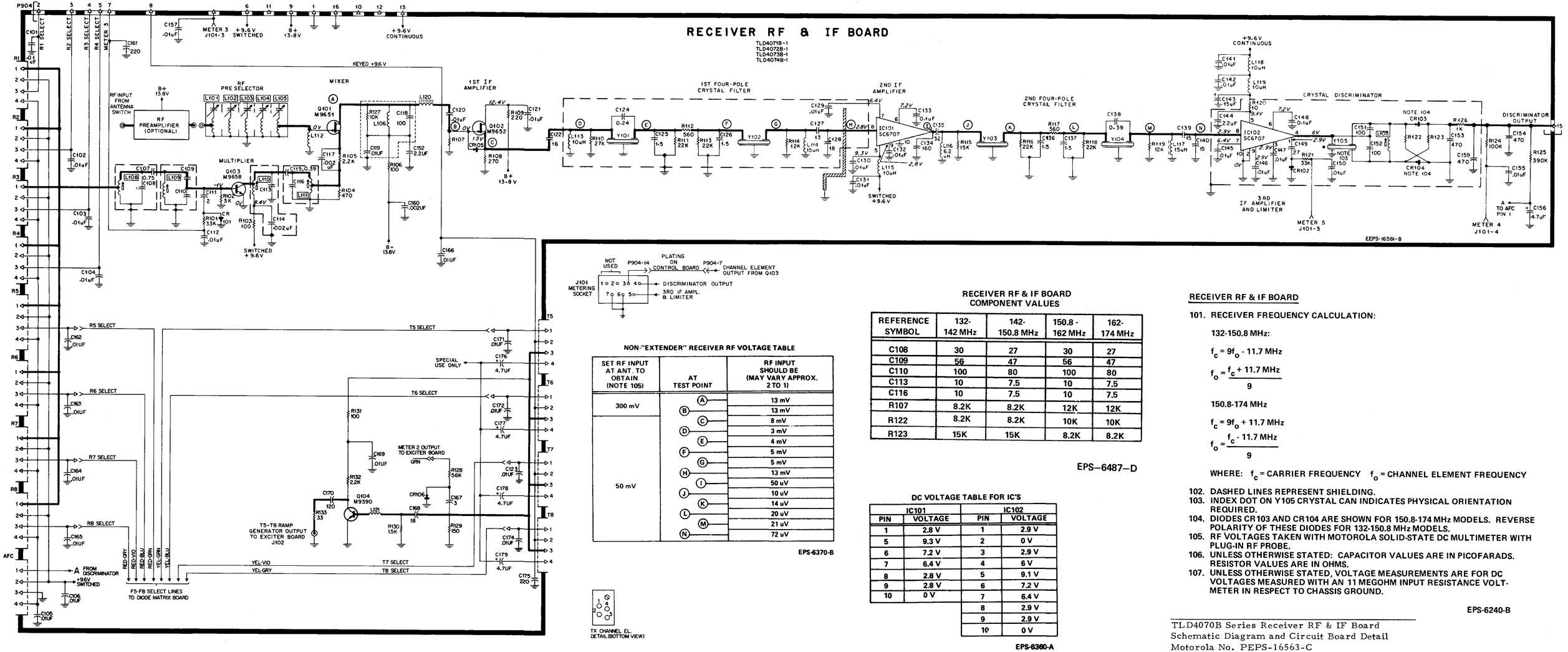
TRANSISTOR DETAILS
M9654



CRYSTAL DETAIL
(Y105)



IMPORTANT- ORIENT INDEX DOT ON TOP OF CAN AS SHOWN ON CIRCUIT BOARD DETAIL



NON-"EXTENDER" RECEIVER RF VOLTAGE TABLE

SET RF INPUT AT ANT. TO OBTAIN (NOTE 105)	AT TEST POINT	RF INPUT SHOULD BE (MAY VARY APPROX. 2 TO 1)
300 mV	A	13 mV
	B	13 mV
50 mV	C	8 mV
	D	3 mV
	E	4 mV
	F	5 mV
	G	5 mV
	H	13 mV
	I	50 uV
	J	10 uV
	K	14 uV
	L	20 uV
	M	21 uV
	N	72 uV

EPS-6370-B

RECEIVER RF & IF BOARD COMPONENT VALUES

REFERENCE SYMBOL	132-142 MHz	142-150.8 MHz	150.8-162 MHz	162-174 MHz
C108	30	27	30	27
C109	56	47	56	47
C110	100	80	100	80
C113	10	7.5	10	7.5
C116	10	7.5	10	7.5
R107	8.2K	8.2K	12K	12K
R122	8.2K	8.2K	10K	10K
R123	15K	15K	8.2K	8.2K

EPS-6487-D

DC VOLTAGE TABLE FOR IC'S

IC101 PIN	IC101 VOLTAGE	IC102 PIN	IC102 VOLTAGE
1	2.8 V	1	2.9 V
5	9.3 V	2	0 V
6	7.2 V	3	2.9 V
7	6.4 V	4	6 V
8	2.8 V	5	9.1 V
9	2.8 V	6	7.2 V
10	0 V	7	6.4 V
		8	2.9 V
		9	2.9 V
		10	0 V

EPS-6360-A

RECEIVER RF & IF BOARD

101. RECEIVER FREQUENCY CALCULATION:

132-150.8 MHz:

$$f_c = 9f_o - 11.7\ \text{MHz}$$

$$f_o = \frac{f_c + 11.7\ \text{MHz}}{9}$$

150.8-174 MHz

$$f_c = 9f_o + 11.7\ \text{MHz}$$

$$f_o = \frac{f_c - 11.7\ \text{MHz}}{9}$$

WHERE: f_c = CARRIER FREQUENCY f_o = CHANNEL ELEMENT FREQUENCY

102. DASHED LINES REPRESENT SHIELDING.
103. INDEX DOT ON Y105 CRYSTAL CAN INDICATES PHYSICAL ORIENTATION REQUIRED.
104. DIODES CR103 AND CR104 ARE SHOWN FOR 150.8-174 MHz MODELS. REVERSE POLARITY OF THESE DIODES FOR 132-150.8 MHz MODELS.
105. RF VOLTAGES TAKEN WITH MOTOROLA SOLID-STATE DC MULTIMETER WITH PLUG-IN RF PROBE.
106. UNLESS OTHERWISE STATED: CAPACITOR VALUES ARE IN PICOFARADS. RESISTOR VALUES ARE IN OHMS.
107. UNLESS OTHERWISE STATED, VOLTAGE MEASUREMENTS ARE FOR DC VOLTAGES MEASURED WITH AN 11 MEGOHM INPUT RESISTANCE VOLTMETER IN RESPECT TO CHASSIS GROUND.

EPS-6240-B

TLD4070B Series Receiver RF & IF Board
Schematic Diagram and Circuit Board Detail
Motorola No. PEPS-16563-C
(Sheet 3 of 3)
10/14/76-UP