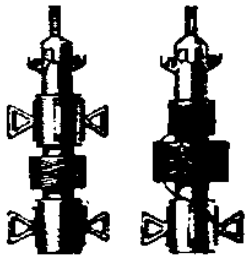
Miller

70-A 70-RF 70-OSC 69-OSC



Miniature Adjustable Broadcast Band Coils

MINIATURE ADJUSTABLE BROADCAST BAND COILS

Their **small physical size** and the fact that they can be **adjusted to the inductance required,** make these coils ideally suited for **replacement** service as well as in the **design** of small broadcast band receivers.

Antenna and R.F. coils have **high impedance primaries** and high-Q **Litz wire wound secondaries** for use with any variable condenser having a maximum capacity between **250 and 450** micromicrofarads.

The No. 70 oscillator coil has a primary and a **tapped secondary** for use in all common padded or unpadded oscillator circuits. It may be adjusted to track with I.F. amplifiers between **100 and 550 KC.**

The No. 69 Oscillator coil has a capacity coupling winding, and can be used in circuits using a padding condenser or with a tuning condenser of the cut section type where no pad is required. It may be adjusted to track with I.F. amplifiers between **100 and 550 KCs.**

Mounting is by means of a hole in chassis ¼" dia.

Dimensions: ½" diameter x 1½" long (Nos. 70-A and 70-RF).
½" diameter x 1⅛" long (No. 70-OSC and 69-OSC).

Cat No.	Use	Frequency Range	List Price
70-A	Antenna Stage	540-1600 KC	$1.50
70-RF	R. F. Stage	540-1600 KC	1.50
70-OSC	Oscillator Stage	540-1600 KC (I.F. 100-550 KC)	1.50
69-OSC	Oscillator Stage Capacity Coupling	540-1600 KC (I.F. 100-550 KC)	1.50

Reversal of connections 4 and 5 may be required to obtain oscillation.

70-A FED. 5M-3-56

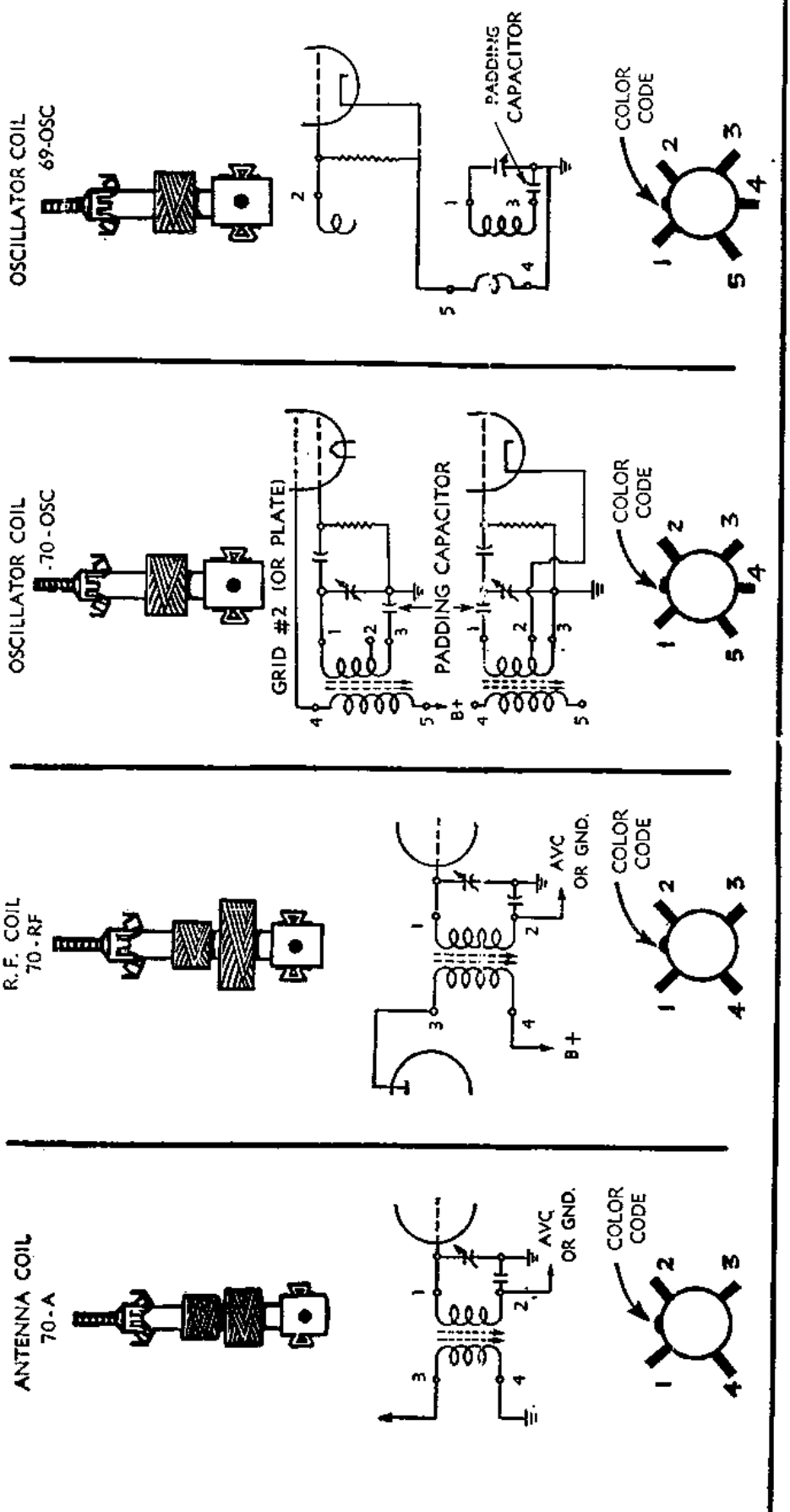
(Available Through Your Local Distributor)

J. W. MILLER COMPANY

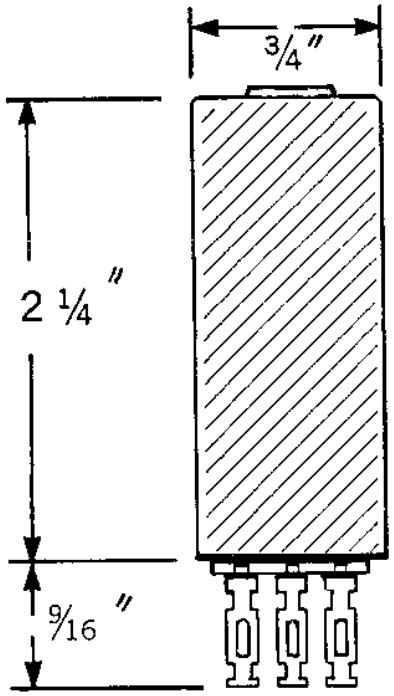
5917 S. Main Street, Los Angeles 3, California

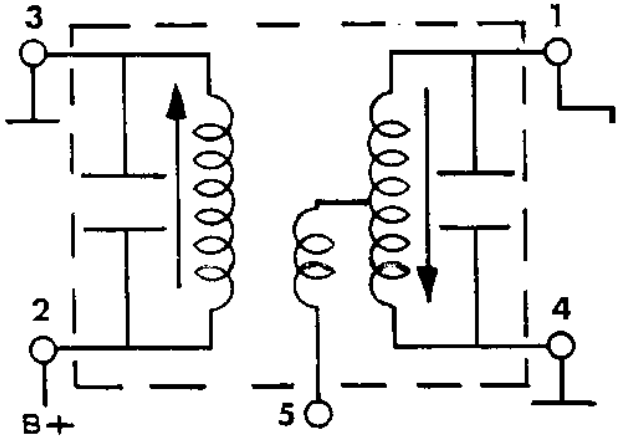
Miller

MINIATURE ADJUSTABLE BROADCAST BAND COILS

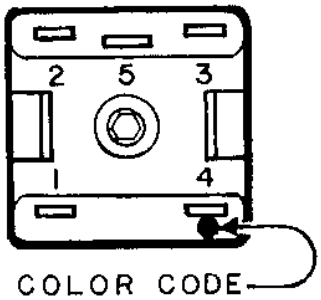


Miller: 7113-P 7121-P

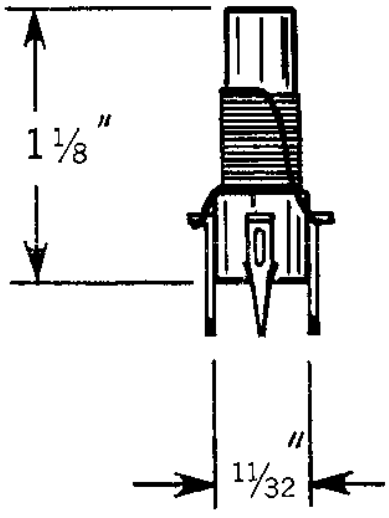


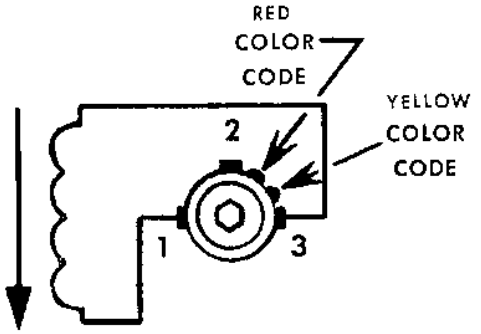


K Clip Mtg.



MILLER PART	FREQ.	USE
7113-P	4.5 Mc.	RATIO DETECTOR





28 uh - 90 uh

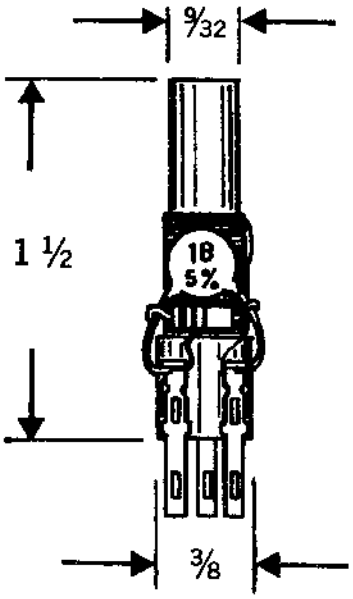
This item is constructed for printed circuit application.

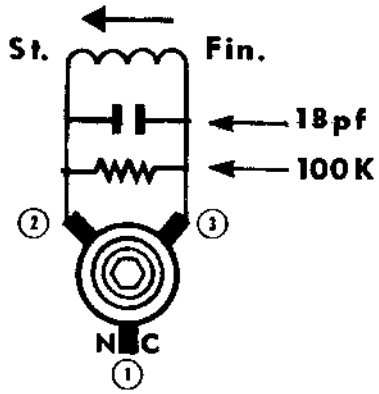
P.C. Mtg.

MILLER PART	FREQ.	USE
7121-P	4.5 Mc.	QUADRATURE

7127 7128

Miller

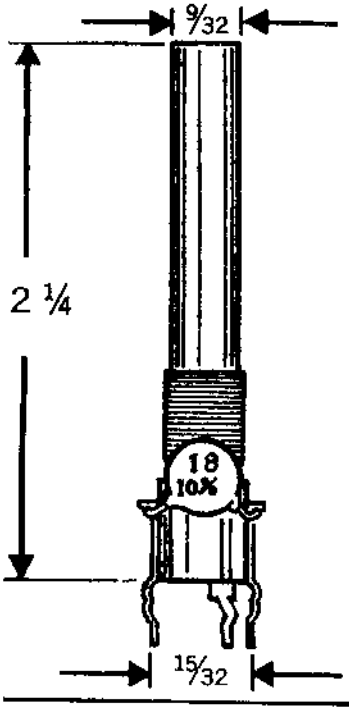


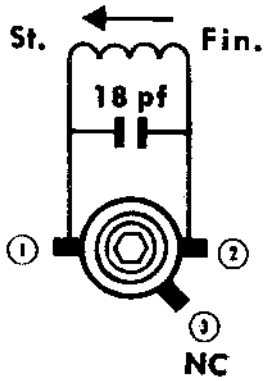


Coil Only
L: 45.6 uh - 54 uh

P.C. Mtg.

MILLER PART	FREQ.	USE
7127	4.5 Mc.	QUADRATURE



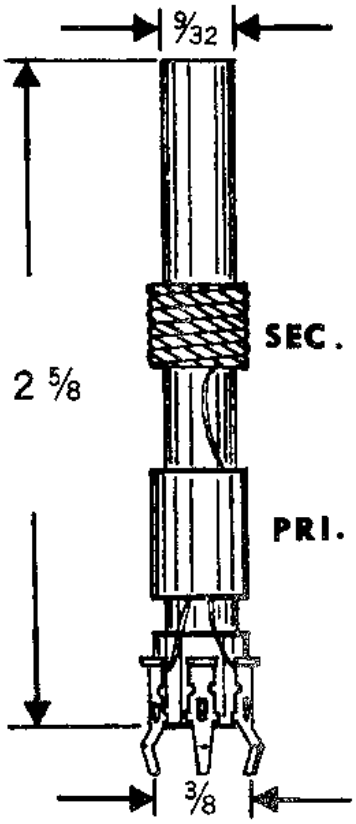


Coil Only
L: 27.5 uh - 70 uh

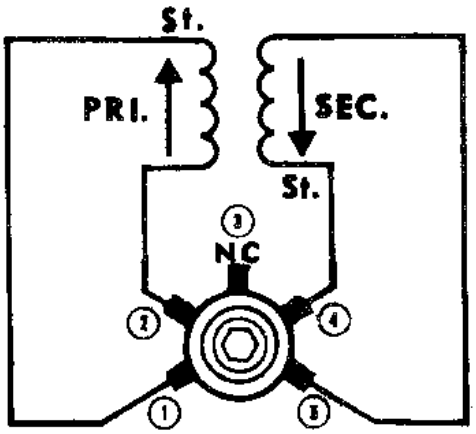
P.C. Mtg.

MILLER PART	FREQ.	USE
7128	4.5 Mc.	QUADRATURE

7129 7130



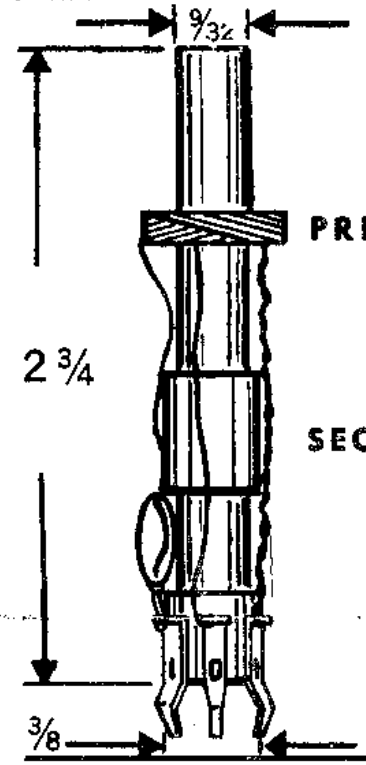
PRI. 126 uh - 222 uh



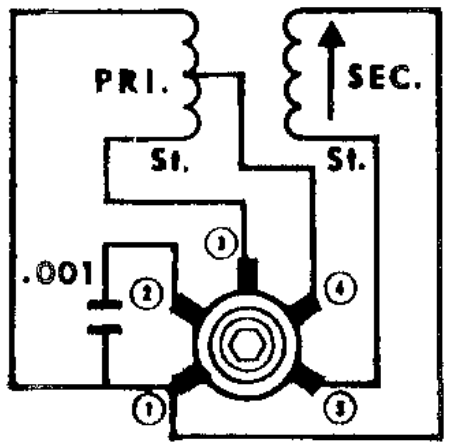
SEC. 52.8 uh - 97.2 uh

P.C. Mtg.

MILLER PART	FREQ.	USE
7129	4.5 Mc.	SOUND I.F.



PRI: 384 uh



SEC: 60.5 uh - 118 uh

P.C. Mtg.

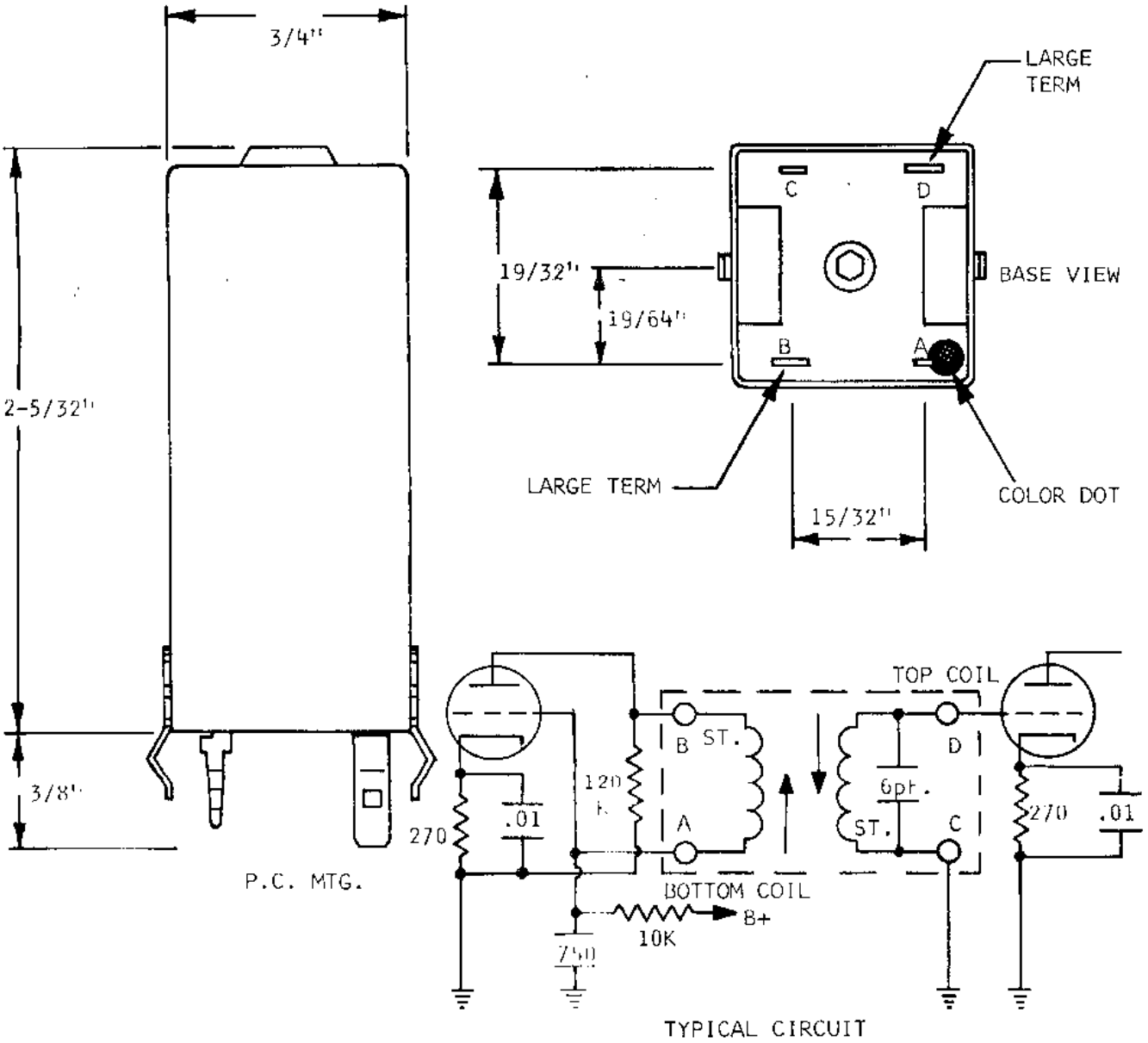
MILLER PART	FREQ.	USE
7130	4.5 Mc.	SOUND I.F.

7127-30 5M CG 8-74

PRINTED IN U.S.A.

(Available through your local distributor)

Miller: 7141 **www.33audio.com**



TYPICAL CIRCUIT

PART FUNCTION: SOUND I.F.

CENTER FREQUENCY: 4.5 MHz.

PRIMARY	TERM: A & B	9.1 OHMS
SECONDARY	TERM: C & D	5.4 OHMS

USED ON:	STOCK
DWG. BY	W. E. K.
APP. BY	J. H. B.
DATE:	12-6-66

J. W. MILLER COMPANY
19070 REYES AVENUE | P.O. BOX 5825 COMPTON, CALIF. 90224

SCALE: N. T. S. DWG. NO. 7141

STANDARD PART NO.

7141

71-OSC

Universal Adjustable Broadcast Band Oscillator Coil

UNIVERSAL ADJUSTABLE BROADCAST BAND OSCILLATOR COIL

The Cat. No. 71-OSC is designed to operate properly in any kind of broadcast band oscillator circuit with any converter tube. It has a primary winding with 2 taps thus allowing **6 different feed-back combinations** including cathode coupling. It may be adjusted for any intermediate frequency within the range of **100-550 KC;** it will track with variable condensers having a maximum value between **250 and 450 mmf** in **padded** circuits and between **100 and 200 mmf** in **unpadded** circuits.

Mounting clip fits into a 5/16" diameter hole. Dimensions: ⅝" by 1½" high.

Cat. No.	Use	Frequency Range	List Price
71-OSC	Oscillator Stage	R.F. 500-1800 KC (I.F. 100-550 KC)	~~$2.00~~

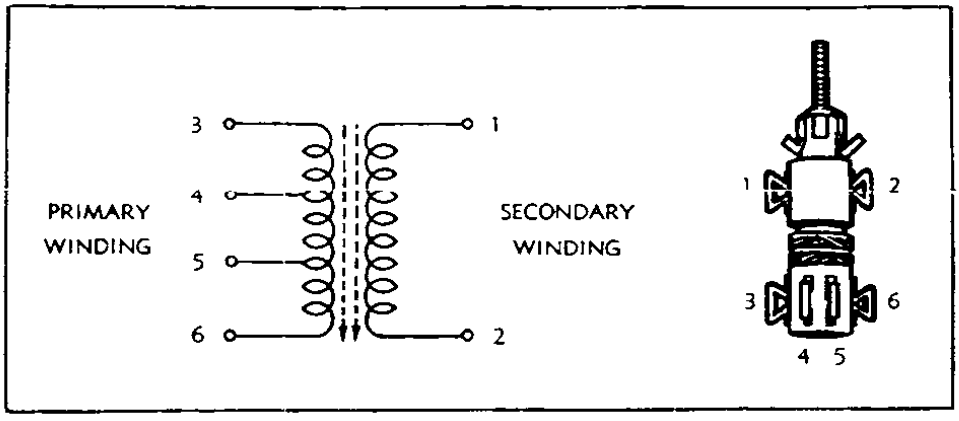
CONNECTION CHART

	Secondary Connections		Primary Connections			
Tube Type	Oscillator Grid	Ground or Paddler	Oscillator Anode	B+	Cathode	Ground
6BA7, 6BE6,	1	2			6	5
6SA7, 6SB7,	1	2			6	5
7B8, 7Q7,	1	2			6	5
12BA7, 12BE6,	1	2			6	5
12SA7, 14B8,	1	2			6	5
14Q7	1	2			6	5
6D8, 6J8, 6K8,	1	2				
7J7, 7S7,	1	2				
12K8, 14J7	1	2	3	4		
		or:	4	5		
1B7, 1C6, 1C7	1	2	4	6		
1R5, 2A7, 6A7,	1	2	4	6		
6A8, 7A8, 12A8	1	2	4	6		
1A6, 1A7, 1D7,	1	2	3	5		
1LA6, 1LC6	1	2	3	5		
1E8	1	2	3	6		

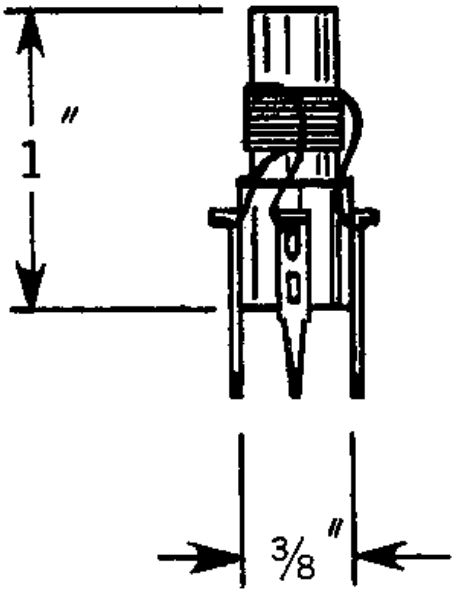
Fed. - 5M - 2-55

(Available Through Your Local Distributor)

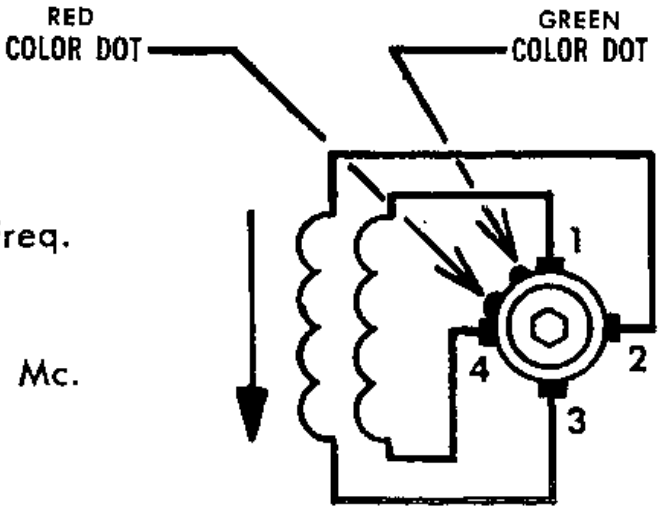
J. W. MILLER COMPANY
5917 S. Main Street, Los Angeles 3, California



Miller: 7513-P



Approx. Freq.
Range
41 to 47 Mc.

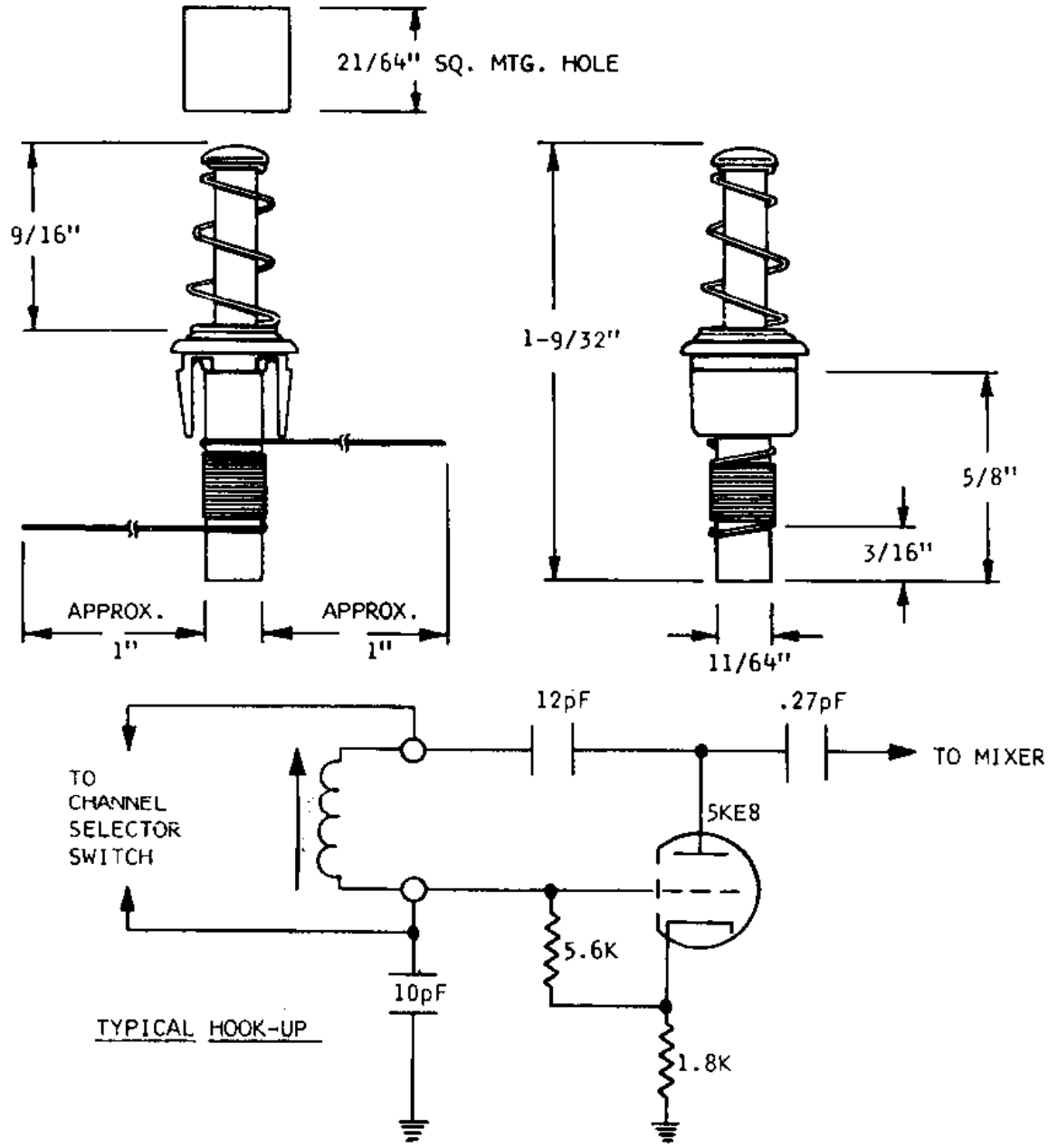


.67 uh - 1.12 uh
(per coil)

This item is constructed for printed circuit application.

MILLER PART	FREQ.	USE
7513-P	44 Mc.	VIDEO I.F.

7603



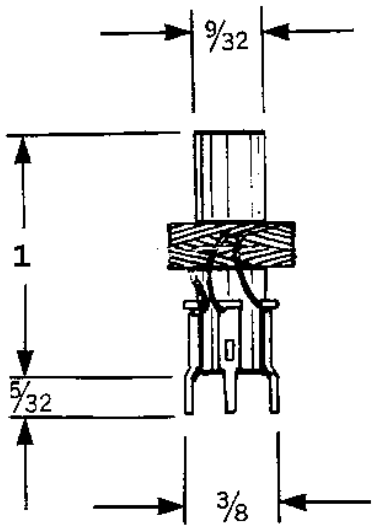
PART FUNCTION: VHF OSC. FINE TUNING COIL

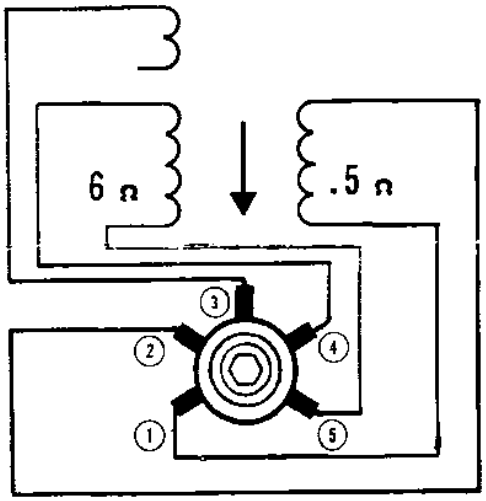
MIN. CORE POSITION			MAX. CORE POSITION			Rdc. OHMS MAX.	I mA. MAX.	WIRE SIZE	WIRE TURNS
L MAX.	Q MIN.	TEST FREQ.	L MIN.	Q MIN.	TEST FREQ.				
1.8 uH	56	7.9 MHz	2.7 uH	72	7.9 MHz	.28	256	32	22

USED ON: STOCK	BELL INDUSTRIES J. W. Miller Division 19070 Reyes Avenue P.O. Box 5825 Compton, California 90224		STANDARD PART NO.
DWG. BY W. E. K.			7603
APP. BY J. H. B.			
DATE: 1-17-68	SCALE: N. T. S.	DWG. NO. 7603	

7752 7753

Miller

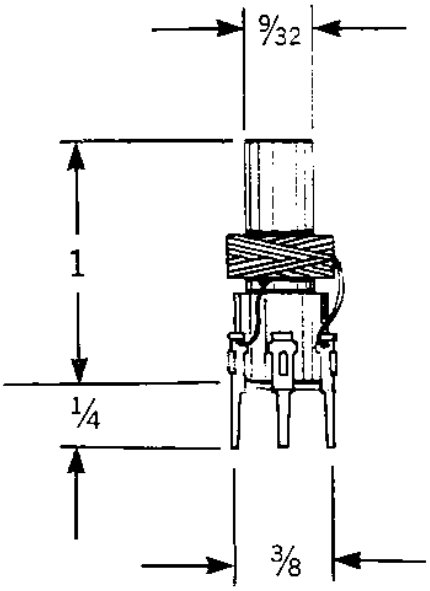


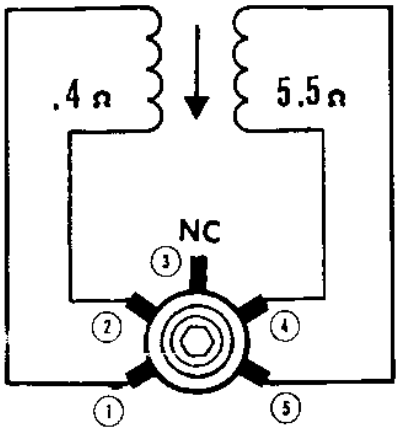


L: (4-5) 160 uh - 250 uh

P.C. Mtg.

Miller Part	FREQ	USE
7752	535-1650 kc.	AM OSC.



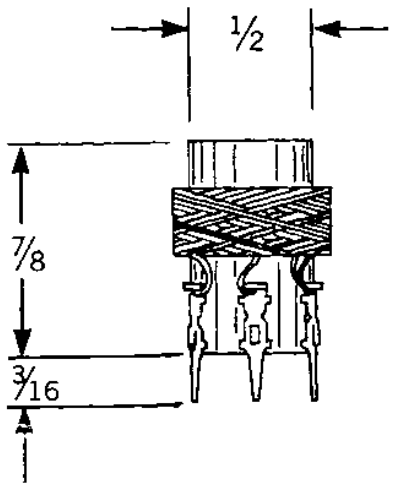


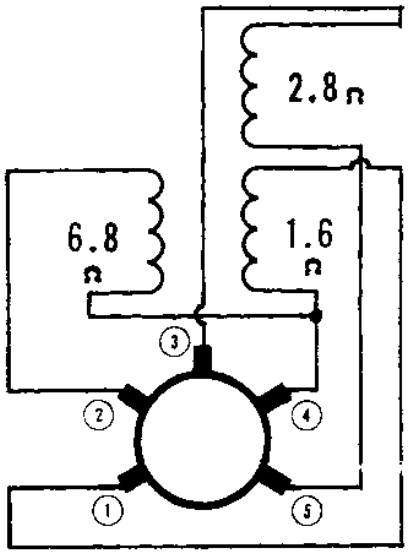
L: (4-5) 140 uh - 240 uh

P.C. Mtg.

MILLER PART	FREQ.	USE
7753	535-1650 kc.	AM OSC.

7754 7755

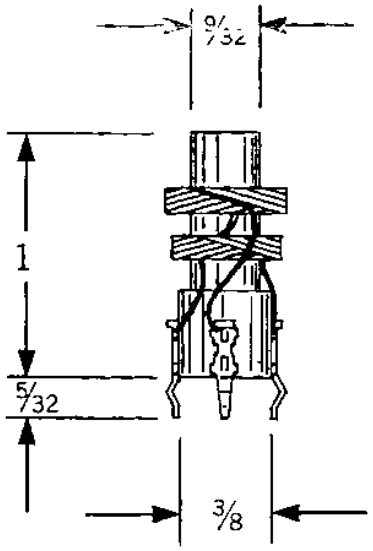


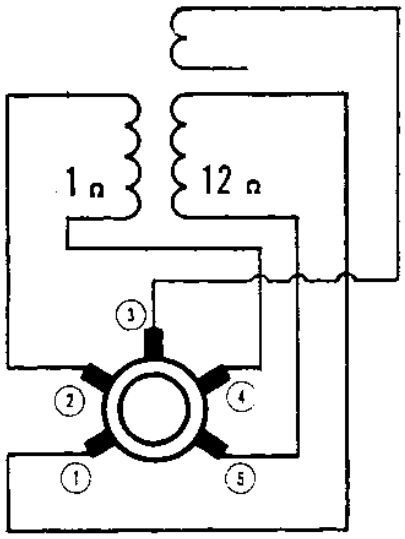


L: (2-4) 145 uh

P.C. Mtg.

MILLER PART	FREQ.	USE
7754	535-1650 kc.	AM OSC.





L: (1-5) 178 uh

P.C. Mtg.

MILLER PART	FREQ.	USE
7755	535-1650 kc.	AM OSC.

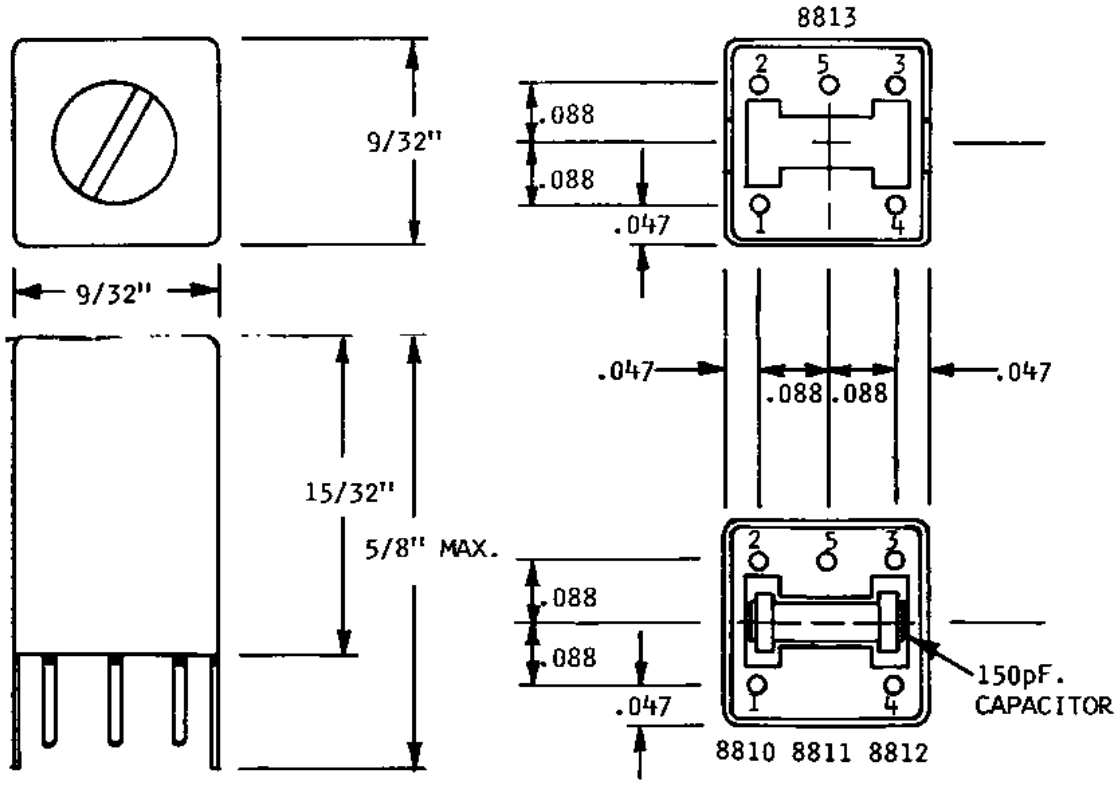
7752-7755 5M
8-64 FH

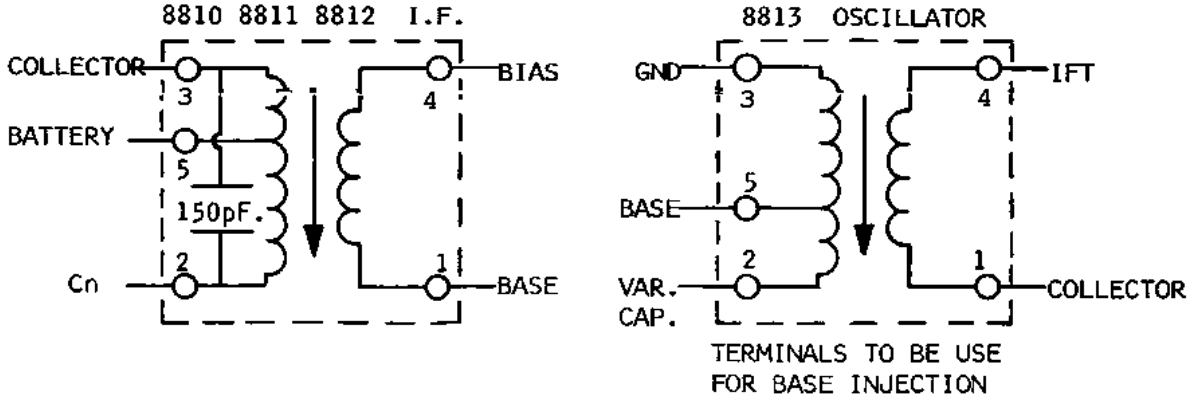
(Available through your local distributor)

PRINTED IN U.S.A.

J. W. MILLER COMPANY
5917 S. Main Street, Los Angeles 3, California

8810 8811 8812 8813





455 kHz I.F. TRANSFORMERS

PART NO.	MATCHING IMPEDANCE		UNLOADED	LOADED	CALCULATED TURNS RATIO		
	PRIMARY	SECONDARY	Q -10+20%	Q -10+20%	2&3 3&5	3&5 1&4	2&3 1&4
8810	50K	800	70	35	1.93	7.91	15.3
8811	30K	500	70	35	2.71	7.75	21.6
8812	20K	5K	70	35	3.11	2.00	6.22

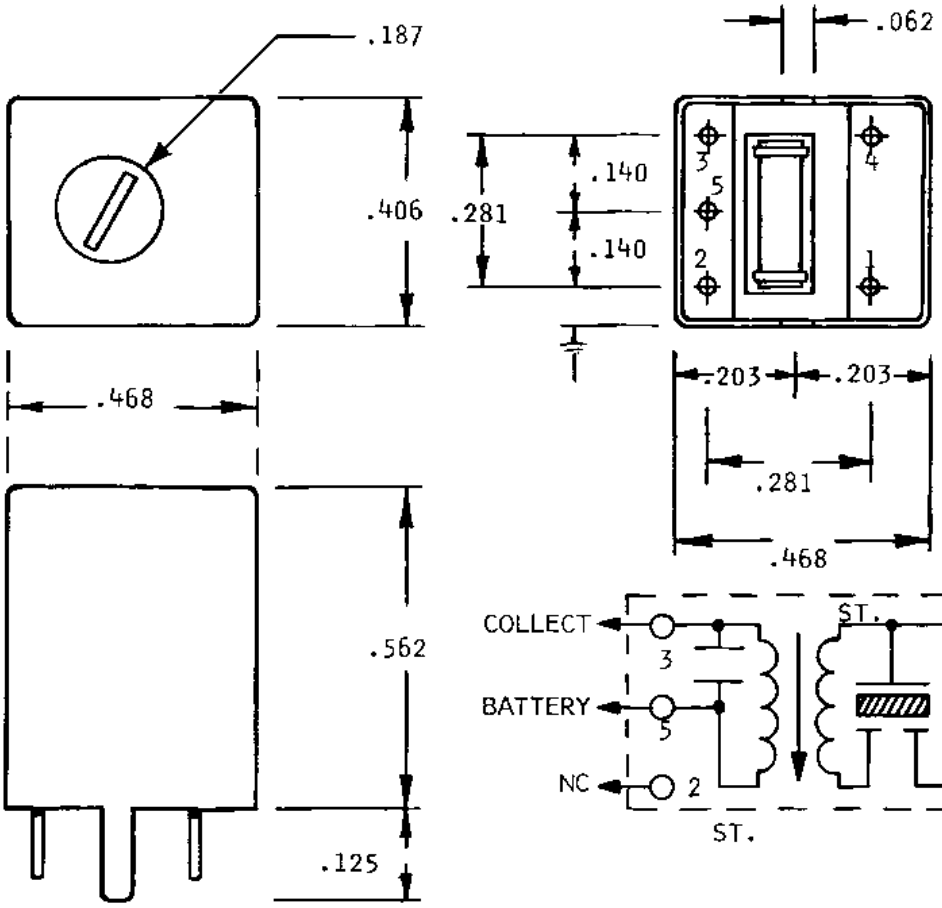
OSCILLATOR COIL

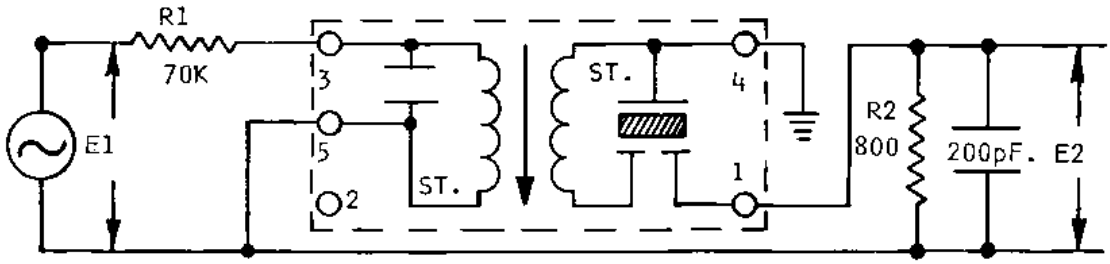
PART NO.	TERM: 2&5 L RANGE	FREQUENCY RANGE	TERM 1&4	TERM 2&3	TERM 3&5
8813	255 - 328 UH	535 - 1605 kHz	10 TURNS	120 TURNS	3 TURNS

USED ON: STOCK	J. W. MILLER CO.		STANDARD PART NO.
DWG. BY W. E. K.	5917 SO. MAIN		8810 8812
APP. BY W. R. C.	LOS ANGELES, CALIF.		8811 8813
DATE: 11-10-67	SCALE: N. T. S.	DWG. NO. 8810-11-12-13	

8810-11-12-13-14 5M FH 11-67

8814





$$\text{INSERTION LOSS} = 10 \log \frac{R2}{R1} \left(\frac{E1}{E2}\right)^2 \text{dB}$$

NOTE: A NEGATIVE DC POTENTIAL MUST NOT BE APPLIED TO THE "HOT" #1 TRANSDUCER TERM.

RIPPLE, WITH PASSBAND: LESS THAN 1 dB
INSERTION LOSS: LESS THAN 10 dB
INPUT IMPEDANCE: 70K
LOAD IMPEDANCE: 800 OHMS, SHUNTED BY 200 pF.

TEMP. COEF. RELATIVE TO CENT. FREQ:- (-80×10^{-6}) PER DEG. CENT.
OPERATING TEMP. RANGE: -10° TO +70° C.
MAX. DC VOLT ACROSS TRANSDUCERS: 50V.
MAX. SIG. VOLT TO TRANSDUCER: 5 VOLTS

SPECIFICATIONS (TENTATIVE)

PART NO.	CENTER FREQ. kHz	PASSBAND kHz @ -6dB	SELECTIVITY dB MIN.
8814	455 ± 1	4 (+1, -0.5)	22 (± 6 kHz)

USED ON: STOCK	J. W. MILLER CO. 5917 SO. MAIN LOS ANGELES, CALIF.		STANDARD PART NO.
DWG. BY W. E. K.			8814
APP. BY W. R. C.			
DATE: 11-14-67	SCALE: N. T. S.	DWG. NO. 8814	

8810-11-12-13-14 5M FH 11-67

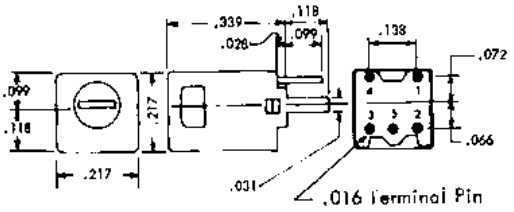


Figure 1

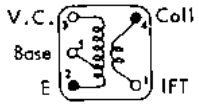


Figure 2

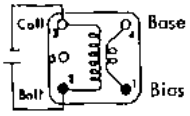


Figure 3

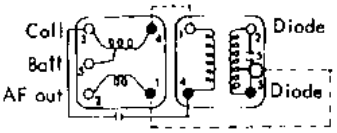


Figure 4A Figure 4B

PART NO.	FREQ.	USE	CAPACITANCE	IMPEDANCE	Qo	QL	FIG.
8815	455 KHz	1st I.F.	100 PF	50 K - 2 K	85 ± 20 %	50 ± 20 %	1
8816	455 KHz	2nd I.F.	100 PF	50 K - 2 K	85 ± 20 %	28 ± 20 %	1
8817	455 KHz	3rd I.F.	100 PF	5 K - 5 K	85 ± 20 %	35 ± 20 %	1
8818	540-1600 KHz	B.C. OSC.	Variable Capacitor 67-78 PF Max.	---------	50 MIN.	--------	2
8855	10.7 MHz	1st I.F.	50 PF (External)	20 K - 75 Ω	100 ± 20 %	30 ± 20 %	3
8856	10.7 MHz	2nd & 3rd I.F.	50 PF	15 K - 300 Ω	90 ± 20 %	30 ± 20 %	1
8857	10.7 MHz	Disc. Pri.	65 PF (External)	12 K - 3 K	95 ± 20 %	25 ± 20 %	4A
8858	10.7 MHz	Disc. Sec.	68 PF	----- - 12 K	100 ± 20 %	35 ± 20 %	4B

USED ON: STOCK	J. W. MILLER CO. 5917 SO. MAIN LOS ANGELES, CALIF.	STANDARD PART NO. 8815, 16, 17, 18 8855, 56, 57, 58
DWG. BY R.A.V.		
APP. BY F.T.S.		
DATE: 3-27-69	SCALE: NONE	DWG. NO. 8815-18-55-58