SUGGESTED PRICE 20 CENTS

Industrial Receiving-Type Tubes

Industrial
Military
Commercial

RCA

RIT-104G

RCA | Electronic Components | Harrison, N.J. 07029

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Introduction

With the increasing demands on modern communication technology, the need for a line of highly dependable receiving tubes is more pressing than ever. RCA has met this challenge by developing and maintaining a highly-reliable line of tubes designed to provide dependable, high-level performance.

RCA's premium line of industrial-receiving tubes is designed, manufactured, and tested to meet the stringent requirements of communication and other industrial applications. All RCA Premium Types undergo the following testing and sampling procedures.

Every tube manufactured must meet a 0.4% quality control level for the most important electrical parameters such as gm, plate, screen, and heater current along with control of: heater-to-cathode leakage; reverse grid current caused by gas evolution or grid emission; and high-resistance, brief-duration, interelement shorts. In addition, other quality-control tests (typically having 2.5% to 6.5% AQL's) are designed to check mu, interelectrode capacity, cutoff plate current, insulation resistance, and screen-grid emission, on each production lot.

Glass-strain, base-strain, shock, and vibration tests are performed on each production lot to insure mechanical integrity of tube structure. After undergoing a shock test of 600 g's or more, the sample tested must meet electrical test limits reduced only slightly from initial limits.

Life testing is the most significant part of the RCA Premium-Tube testing program. Increased reliability of each production lot of a given type results from: (1) 1000 hour, elevated temperature, full dissipation life tests of larger sample sizes (20 to 32 tubes) and (2) electrical testing at 1000 hours for characteristics such as gm, plate current, reverse-grid current, and insulation resistance. Small acceptance numbers assure a process average acceptable failure rate of 1.1% per 1000 hours.

Early hour stability of electrical parameters is further controlled for each lot by applying strict AQL's to large sample sizes that are related to production quantities. A heater-cycling stress test, which consists of cycling the heater on and off 2000 times at elevated (110%) heater voltage, is also performed.

Premium Types				Nuvistor Types	
OA2WA	12AT7WB	5726	6005	7586	8203
OB2WA	5651WA	5727	6080WA	7587	8393
6AU6WB	5654	5749	6186	7895	8627
6J6WA	5670	5751	6189	8056	8628
12AT7WA	5725	5814A	8532	8058	8808▲

In addition to the Premium Types, a complete line of mobile-oriented types are available with special tests and controls for 6-volt and 12-volt battery systems. The 6600 and 7000 series are tested and controlled for gm or plate current at low and high heater voltage that simulate the voltage extremes possible in mobile battery-generator systems.

The unique requirements of mobile transmitter service have been met with controls such as the 450 MHz tripler test in a mobile transceiver performed on a sample of each production lot of type 6939's. The high-quality performance of type 7551 as a Class C device is also assured by 100% factory testing in a Class C amplifier circuit.

The care, which is given to the design and manufacture of RCA's Premium Tubes and which extends to its entire line of industrial-receiving tubes and nuvistors,* makes the RCA line of industrial-receiving tubes the finest line available.

* Detailed data for RCA Industrial and Military Nuvistors are given in catalog NIT-140. This publication may be obtained by writing to RCA, Commercial Engineering, Harrison, N.J. 07029.

▲ Formerly RCA Developmental Type A15526.

Application Guide

1. AF Amplifier
2. Automatic Gain Control
3. Balanced Modulator/Balanced Mixer
4. Cathode-Coupled, Direct-Drive (RF)
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8. Converter
9. DC Amplifier
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1. AF Amplifier

CLASS - A_1

Twin Diode – Medium-Mu Triodes

12SW7 26C6

High-Mu Triode - 5719

Power Triodes

955 5718 9002

Medium-Mu Twin Triodes

12SX7GT 5687 6072
5670 5692 6189

High-Mu Twin Triodes

6112 6681/12AX7A

Twin Power Triode - 3A5

Sharp-Cutoff Pentode

6AH6WA 1620

Power Pentodes

3A4 1621 7054
6AG7Y 5672 8077/7054
6AK6 6677/6CL6

Beam Power Tubes

12A6 6005
1622 6550
5686 6550/V1
5824 6669/6AQ5A
5881 7061
5902

Twin Beam Power Tube - 26A7GT

Pentagrid Amplifier - 1612

Beam-Deflection Tube - 7360

CLASS - AB_1

Medium-Mu Twin Triodes

5670

Beam Power Tubes

1614 6669/6AQ5A
1619 7551
6005 7558

Twin Beam Power Tube - 26A7GT

CLASS - B

Twin Power Triode - 1635

2. Automatic Gain Control

Remote-Cutoff Pentode

5749

3. Balanced Modulator/ Balanced Mixer

Beam-Deflection Tube

7360

4. Cathode-Coupled, Direct-Drive (RF)

Medium-Mu Twin Triodes

6DJ8/ECC88 6922/E88CC

5. Cathode Drive (RF) (Grounded Grid)

High-Mu Triodes

6J4 8532
8058

6. Cathode Follower

Medium-Mu Triodes

6814 8056

Medium-Mu Twin Triodes

5670 6350 7044
5687 6922/E88CC 7308
5965

7. Clipper

Twin Diodes

5726 7055

8. Converter

Pentagrid Converters

12SY7 26D6 5750

9. DC Amplifier

Sharp-Cutoff Pentode - 5693

Medium-Mu Twin Triode - 5692

High-Mu Twin Triode - 5691

10. Delay Circuit

Sharp-Cutoff Pentodes

6AS6 5725
5636

11. Demodulator

Beam-Deflection Tube - 7360

Application Guide [Cont'd]

12. Detector Audio

Twin Diode — Medium-Mu Triodes
12SW7 26C6

VHF

Twin Diodes
5726 6663/6AL5 7055
5896 6887

UHF

Diodes
9005 9006

13. Driver

Beam Power Tubes
5763 7551 7905
6417 7558

14. Frequency Converter

High-Mu Triode - 6664/6AB4

High-Mu Twin Triode - 6679/12AT7

Beam-Deflection Tube - 7360

15. Frequency Divider

Medium-Mu Twin Triodes
5670 5964 6350
5687 6211 7044
5963

Power Pentode - 6197

16. Frequency Multiplier

FREQUENCY DOUBLER

High-Mu Triode
8808

Power Triode
8203 8627

Twin Tetrode - 6360A

Power Pentodes
7054 8077/7054

Beam Power Tubes
5763 7551 7905
6417 7558

FREQUENCY TRIPLER

Beam Power Tubes
5763 6417 7905

Twin Power Pentode - 6939

17. Gated Amplifier

Sharp-Cutoff Pentodes
6AS6 5725
5636

Pentagrid Amplifier - 5915

18. Grid-Controlled Rectifier

Triodes (Thyratron)
6D4 884

Tetrodes (Thyratron)
2D21 2050A 5727
502A 5696 6012
2050

19. Indicator, Voltage

Electron-Ray Tubes
1629 6977

20. IF Amplifier

VHF

Medium-Mu Triodes
7586 8056

Medium-Mu Twin Triodes
5687 6922/E88CC
6386 7308

Sharp-Cutoff Pentodes
6AU6WB 6136 7056
5654 6676/6CB6A

Remote-Cutoff Pentodes
5749 6660/6BA6

Sharp-Cutoff Tetrode - 7587

High-Mu Triode - 7895

UHF

Sharp-Cutoff Pentodes
5840 6186

Semiremote-Cutoff Pentodes
5899 6206

Remote-Cutoff Pentode - 9003

21. Inverter

Medium-Mu Triode - 6814

Medium-Mu Twin Triodes
6350 7044

22. Limiter

High-Mu Twin Triode - 7898

23. Low-Plate-Voltage Nuvistor Type for Hybrid Equipment

Medium-Mu Triode - 8056

24. Mixer

VHF

Medium-Mu Twin Triodes
407A 5814A 6922/E88CC
5670 6386

High-Mu Twin Triodes
12AT7WA 12AT7WB 7898

Medium-Mu Triode — Sharp-Cutoff Pentodes
6678/6U8A 7059

Sharp-Cutoff Tetrode - 7587

Sharp-Cutoff Pentodes
6AS6 5725

Pentagrid Converters
12SY7 26D6 5750

UHF

Diode - 9005

Medium-Mu Twin Triode
6J6WA

Sharp-Cutoff Pentodes
5636 9001

Remote-Cutoff Pentode - 9003

25. Modulator

Twin Tetrode - 6360A

Beam Power Tubes
7551 7558

Power Pentodes
7054 8077/7054

26. Multivibrator

Medium-Mu Twin Triodes
12SX7GT 6189
407A 6350
5670 6680/12AU7A
5687 6922/E88CC
5692 7044
5814A

High-Mu Twin Triodes
12AT7WA 5751

Application Guide (Cont'd)

27. Oscillator, RF

VHF

Power Triode - 8203

High-Mu Triode - 6664/6AB4

Medium-Mu Twin Triodes

407A	5814A	6680/12AU7A
5670	6111	

High-Mu Twin Triodes

12AT7WA	7898
12AT7WB	

Medium-Mu Triode — Sharp-Cutoff Pentodes

6678/6U8A	7059

Twin Tetrode - 6360A

Beam Power Tubes

3B4WA	5763	7558
1614	6417	7905
1619	7551	

Power Pentodes

1613	7054	8077/7054

Medium-Mu Triode — Power Pentode - 7060

Pentagrid Converters

12SY7	26D6	5750

UHF

Medium-Mu Triodes

6F4	8056	8393
7586		

High-Mu Triodes

7895	8058	8808

Power Triodes

955	8627	9002
5718		

Medium-Mu Twin Triodes

6J6WA	6021

Sharp-Cutoff Tetrode - 7587

Twin Power Pentode - 6939

28. "On-Off" Control

(Involving Long Periods of Operation Under Cutoff Conditions)

Twin Diode - 6887

Medium-Mu Triode - 6814

Medium-Mu Twin Triodes

5844	5965	6922/E88CC
5963	6211	7044
5964	6350	

Sharp-Cutoff Pentode - 6AS6

Power Pentode - 6197

Pentagrid Amplifier - 5915

29. Phase Inverter

Medium-Mu Triode - 6814

Medium-Mu Twin Triodes

5670	6189	6922/E88CC
5687	6350	7044
5814A	6680/12AU7A	

High-Mu Twin Triodes

5691	7058
5751	

30. Pulse Amplifier

Medium-Mu Triode - 6814

Medium-Mu Twin Triodes

5670	6350	7044
5687		

31. Pulse Modulator

Twin Diodes

5726

32. RF Power Amplifier

VHF

Power Triode - 8203

Twin Power Triode - 3A5

Beam Power Tubes

3B4WA	5686	7551
1614	5763	7558
1619	6417	7905

Medium-Mu Triode — Power Pentode

7060

Power Pentodes

3A4	1613	8077/7054
6AG7Y	7054	8156
6AN5		

UHF

High-Mu Triode

8808

Power Triodes

955	8627	9002
5718		

Twin Power Tetrode - 6360A

Twin Power Pentode - 6939

33. RF Voltage Amplifier

VHF

Medium-Mu Triodes

5842/417A	8056	8393
7586		

High-Mu Triodes

6664/6AB4	7895	8628

Medium-Mu Twin Triodes

6DJ8/ECC88	6386
407A	6922/E88CC
6111	7057

High-Mu Twin Triode - 6679/12AT7

Sharp-Cutoff Tetrodes

7587	7717/6CY5

Sharp-Cutoff Pentodes

1L4	5693
6AC7W	5847/404A
6AH6WA	6136
6AU6WB	6186
6SJ7Y	6661/6BH6
408A	6676/6CB6A
5654	6688A
5678	7056

Remote-Cutoff Pentodes

26A6	6660/6BA6
5749	6662/6BJ6

Medium-Mu Triode — Power Pentode

7060

UHF

High-Mu Triodes

6J4	8532
8058	

Sharp-Cutoff Pentodes

959	5840	9001

Semiremote-Cutoff Pentodes

5899	6206

Remote-Cutoff Pentode - 9003

34. Rectifier

POWER

Full-Wave Gas Type - 83

Full-Wave Vacuum Types

5R4GYB	2076/5R4GYB	6202
6X4W		

LOW CURRENT

Twin Diodes

5726	6663/6AL5
5896	7055

Single Diodes

9005	9006

PULSE

Half-Wave Vacuum Type - 5642

Application Guide [Cont'd]

35. Relay

Glow-Discharge (Cold-Cathode) Tubes
OA4G 1C21 5823

Triodes (Thyratron)
6D4 884

Tetrodes (Thyratron)
2D21 5663 5727
2050 5696 6012
2050A

36. Sweep-Circuit Oscillator

Triode (Thyratron) - 884

37. Switching

Twin Diode - 6887

Beam-Deflection Tube - 7360

38. Transducer

Mechano-Electronic Transducer - 5734

39. Tubes Operating from Battery Supplies

NOMINAL-12-VOLT STORAGE BATTERY SYSTEMS

Twin Diode - 7055

Twin Diode – High-Mu Triode
7724/14GT8

Medium-Mu Twin Triode - 7057

High-Mu Twin Triodes
7058 7898

Medium-Mu Triode – Sharp-Cutoff Pentodes
7059 7258

Medium-Mu Triode – Power Pentode
7060

Sharp-Cutoff Pentode - 7056

Power Pentodes
7054 8077/7054

Beam Power Tubes
7061 7551

NOMINAL-6-VOLT STORAGE BATTERY SYSTEMS

Twin Diode - 6663/6AL5

High-Mu Triode - 6664/6AB4

Medium-Mu Twin Triode
6680/12AU7A

High-Mu Twin Triodes
6679/12AT7 6681/12AX7A

Medium-Mu Triode – Sharp-Cutoff Pentode
6678/6U8A

Twin Tetrode - 6360A

Remote-Cutoff Pentodes
6660/6BA6 6662/6BJ6

Sharp-Cutoff Pentodes
6661/6BH6 6676/6CB6A

Power Pentode - 6677/6CL6

Beam Power Tubes
6669/6AQ5A 7905

NOMINAL-24-VOLT STORAGE BATTERY SYSTEMS

Twin Diode – Medium-Mu Triode - 26C6

Twin Power Triode - 6082

Remote-Cutoff Pentode - 26A6

Pentagrid Converter - 26D6

Twin Beam Power Tube - 26A7GT

FILAMENTARY-CATHODE TYPES OPERATING FROM DRY-CELL BATTERY SUPPLIES

Half-Wave Vacuum Rectifier - 5642

Twin Power Triode - 3A5

Sharp-Cutoff Pentode - 1L4

Power Pentode - 3A4

Beam Power Tube - 1619

40. Video Amplifier

Sharp-Cutoff Tetrode - 7587

Sharp-Cutoff Pentode - 5639

Power Pentodes
6AG7Y 6AN5 6677/6CL6

41. Voltage Reference

Glow Discharge (Cold-Cathode) Tubes
5651A 5651WA 5783

42. Voltage Regulator

Glow Discharge (Cold-Cathode) Tubes
OA2 OC2 6073
OA2WA OC3 6073/OA2
OA3 OC3A 6074
OA3A OD3 6074/OB2
OB2 OD3A 6626/OA2WA
OB2WA 991

43. Voltage Regulator, Series

Low-Mu Twin Triodes
6AS7G 6080WA 6336A
6080 6082

Beam Power Tube - 5902

44. Volume Expander-Compressor

Pentagrid Mixer
1612

RCA Types for Mobile and Fixed-Station Communications

Mobile

- Types Operating from Batteries and Battery Charger Systems -

RCA Type	E_f/I_f V/mA	Max Rating P_b W	g_m μmho	Base	Terminal Diagram
TYPES OPERATING FROM NOMINAL-12-V STORAGE-BATTERY SYSTEMS					
7054	13.5/275	5	11500	9-Pin Min.	9GK
7055	13.5/155	-	-	7-Pin Min.	6BT
7056	13.5/150	2	6200	7-Pin Min.	7CM Diagram 1
7057	13.5/180	2.2	6800	9-Pin Min.	9AJ
7058	13.5/155	1	1650	9-Pin Min.	9EP
7059	13.5/195	2.5 T 2.8 P	8500T 5200P	9-Pin Min.	9AE
7060	13.5/280	2.5 T 3P	4900T 7000P	9-Pin Min.	9DA
7061	13.5/210	9	4200	9-Pin Min.	9EU
7167	13.5/90	2	8000	7-Pin Min.	7EW
7258	13.5/210	2.8 T 2.3 P	4500T 7800P	9-Pin Min.	9DA
7551	13.5/360	10	5300	9-Pin Min.	9LK
7724/ 14GT8	13.5/150	1.1	1000	9-Pin Min.	9KR
7898	13.5/150	2.75	5500	9-Pin Min.	9EP
8077/ 7054	13.5/275	0.575	11500	9-Pin Min.	9GK
TYPES OPERATING FROM NOMINAL-6-V STORAGE-BATTERY SYSTEMS					
6360A	6.3/820 12.6/410	14.0	3300	9-Pin Min.	6360A
6660/ 6BA6	6.3/300	3.3	4400	7-Pin Min.	7BK Diagram 2
6661/ 6BH6	6.3/150	3.3	4600	7-Pin Min.	7CM Diagram 1
6662/ 6BJ6	6.3/150	3.3	3600	7-Pin Min.	7CM Diagram 1
6663/ 6AL5	6.3/300	For added data, see p.10		7-Pin Min.	6BT
6664/ 6AB4	6.3/150	2.9	10900	7-Pin Min.	5CE
6669/ 6AQ5A	6.3/450	12	4100	7-Pin Min.	7BZ
6676/ 6CB6A	6.3/300	2.3	8000	7-Pin Min.	7CM Diagram 1
6677/ 6CL6	6.3/650	8.5	11000	9-Pin Min.	9BV
6678/ 6U8A	6.3/450	3 T 3 P	8500T 5200P	9-Pin Min.	9AE
6679/ 12AT7	12.6/150 6.3/300	2.8	5500	9-Pin Min.	9A
6680/ 12AU7A	12.6/150 6.3/300	3	2200	9-Pin Min.	9A
6681/ 12AX7A	12.6/150 6.3/300	1.1	1600	9-Pin Min.	9A
7717/ 6CY5	6.3/200	-	8000	9-Pin Min.	7EW
7905	6.3/650	10	6700	9-Pin Min.	9PB
TYPES OPERATING FROM NOMINAL-24-V STORAGE-BATTERY SYSTEMS					
26A6	26.5/70	3.3	4000	7-Pin Min.	7BK Diagram 2
26A7GT	26.5/600	2.2	5700	Octal	8BU
26C6	26.5/70	2.75	1900	7-Pin Min.	7BT
26D6	26.5/70	1.1	-	7-Pin Min.	7CH
6082	26.5/600	13	7000	Octal	8BD
FILAMENTARY-CATHODE TYPES OPERATING FROM DRY-CELL BATTERY SUPPLIES					
1L4	1.4/50	-	1025	7-Pin Min.	6AR
3A4	2.8/100 1.4/200	2	1900	7-Pin Min.	7BB
3A5	2.8/110 1.4/220	1	1800	7-Pin Min.	7BC
3B4WA	For data, refer to Military Specification				7CY
1619	2.5/2000	15	4500	Octal	7AW
5642	1.25/200	For added data, see p.10		Submin.	5642
5672	1.25/50	0.065	650	Submin.	5672
5678	1.25/50	-	1150	Submin.	5678

- Other Types Suitable for Mobile-Station Applications -

QUICK-HEATING-FILAMENT TYPES (For Equipment Requiring Essentially Instant "Off-to-On" Action)					
3B4WA	For data, refer to Military Specification				7CY
1619	2.5/2000	15	4500	Octal	7AW
7905	6.3/650	10	6700	9-Pin Min.	9PB
BEAM-DEFLECTION TYPE HAVING 2 PLATES					
7360	6.3/350	1.5	5400	9-Pin Min.	9KS

RCA Types for Mobile and Fixed-Station Communications (Cont'd)

Fixed-Station

Premium tube types are shown on gray background. These types are subjected to more rigorous tests and controls than other types.

RCA Type	E_f/I_f V/mA	Max Rating P_b W	g_m μmho	Base	Terminal Diagram
RF POWER AMPLIFIERS, OSCILLATORS, OR FREQUENCY MULTIPLIERS – Class C					
3A4	1.4/200	2	1900	7-Pin Min.	7BB
3B4WA	For data, refer to Military Specification				7CY
1613	6.3/700	10	2500	Octal	7S
1614	6.3/900	21	6050	Octal	7S
1619	2.5/2000	15	4500	Octal	7AW
5763	6/750	12	7000	9-Pin Min.	9K
6360A	6.3/820	5	3300	9-Pin Min.	6360A
6417	12.6/375	12	7000	9-Pin Min.	9K
7558	6.3/800	10	5300	9-Pin Min.	9LK
8627 Nuvistor	6.3/150	2.5	13000	5-Pin Nuvistor	12CT
8203 Nuvistor	6.3/160	1.5	6000	5-Pin Nuvistor	12AQ
8808 Nuvistor	6.3/340	6[a]	18000	6-Pin Nuvistor	8808
AF POWER AMPLIFIERS OR MODULATORS – Classes A_1, AB_1, AB_2, or B					
3A4	2.8/100 1.4/200	2	1900	7-Pin Min.	7BB
6AK6	6.3/150	2.75	2300	7-Pin Min.	7BK Diagram 1
6AN5	6.3/450	4.2	8000	7-Pin Min.	7BD Diagram 1
12A6	12.6/150	7.5	3000	Octal	7S
1614	6.3/900	21	6050	Octal	7S
1619	2.5/2000	15	4500	Octal	7AW
1621	6.3/700	8.3	2500	Octal	7S
1622	6.3/900	13.8	6000	Octal	7S
1635	6.3/600	3	-	Octal	8B
5824	25/300	12.5	5000	Octal	7S
5881	6.3/900	23	5200	Octal	7S
6360A	12.6/410 6.3/820	7	3300	9-Pin Min.	6360A
6550	6.3/1600	35	9000	Octal	7S
6550/V1	Matched pair of 6550's				
7558	6.3/800	10	5300	9-Pin Min.	9LK
"SPECIAL RED" TYPES					
5691	6.3/600	1	1600	Octal	8BD
5692	6.3/600	1.75	2200	Octal	8BD
5693	6.3/300	2	1650	Octal	8N
TYPES FOR UHF APPLICATIONS					
6DJ8/ ECC88	6.3/365	1.8	12500	9-Pin Min.	9AJ
6F4	6.3/225	2	5800	7-Pin Acorn	7BR
6J4	6.3/400	2.25	12000	7-Pin Min.	7BQ
955	6.3/150	1.6	2200	5-Pin Acorn	5BC
959	1.25/50	-	600	5-Pin Acorn with 2 Leads	5BE
5636	6.3/150	1.1	3200	Submin.	8DC Diagram 1
5718	6.3/150	3.3	6500	Submin.	8DK
5840	6.3/150	1.1	5000	Submin.	8DE
5896	6.3/300	For added data, see p.10		Submin.	8DJ
5899	6.3/150	1.1	4500	Submin.	8DE
6206	6.3/150	1.1	4500	Submin.	8DC Diagram 2
6939	12.6/300 6.3/600	6	10500	9-Pin Min.	9HL
7308	6.3/335	1.65	12500	9-Pin Min.	9AJ
7586 Nuvistor	6.3/135	1	11500	5-Pin Nuvistor	12AQ
7587 Nuvistor	6.3/150	2.2	10600	5-Pin Nuvistor	12AS
7895 Nuvistor	6.3/135	1	9400	5-Pin Nuvistor	12AQ
8056 Nuvistor	6.3/135	0.45	7500	5-Pin Nuvistor	12AQ
8058 Nuvistor	6.3/135	1.5	12400	5-Pin Nuvistor	12CT
8393 Nuvistor	13.5/60	1	11500	5-Pin Nuvistor	12AQ
8532	6.3/400	2.5	11000	7-Pin Min.	7BQ
8627 Nuvistor	6.3/150	2.5	13000	5-Pin Nuvistor	12CT
8808 Nuvistor	6.3/150	6[a]	18000	6-Pin Nuvistor	8808
9001	6.3/150	0.5	1400	7-Pin Min.	7BD Diagram 2
9002	6.3/150	1.6	2200	7-Pin Min.	7BS
9003	6.3/150	1.7	1800	7-Pin Min.	7BD Diagram 2
9005	6.3/165	For added data, see p.10		5-Pin Acorn	5BG
9006	6.3/150	For added data, see p.10		7-Pin Min.	6BH

[a] At plate cap seal temperature up to 150°C.

RCA Types for Mobile and Fixed-Station Communications (Cont'd)

Fixed-Station

Premium tube types are shown on gray background. These types are subjected to more rigorous tests and controls than other types.

- Rectifiers and Diodes -

RCA Type	E_f/I_f V/A	Max Rating $-e_{bm}$ V	Max Rating $I_o(av)$ mA	Base	Terminal Diagram
POWER RECTIFIERS					
5R4GYB	5/2	2650	147	Octal	5T
6X4W	6.3/0.6	1375	75	7-Pin Min.	5BS
83	5/3	1550	225	Small 4-Pin	4C
2076/ 5R4GYB	5/2	2650	147	Octal	5T
6202	6.3/0.6	1250	50	7-Pin Min.	5BS
PULSED RECTIFIER (High-Voltage, Low-Current Type)					
5642	1.25/0.2	10000	0.25	Submin.	5642

RCA Type	E_f/I_f V/A	Max Rating $-e_{bm}$ V	Max Rating $I_o(av)$ mA	Base	Terminal Diagram
DIODES FOR DETECTOR OR LOW-CURRENT-RECTIFIER APPLICATIONS					
5726	6.3/0.3	360	10	7-Pin Min.	6BT
5896	6.3/0.3	460	10	Submin.	8DJ
6663/ 6AL5	6.3/0.3	275	10	7-Pin Min.	6BT
7055	13.5/0.155	350	10	7-Pin Min.	6BT
9005	3.6/0.165	165	1	5-Pin Acorn	5BG
9006	6.3/0.15	750	5	7-Pin Min.	6BH

- Types for Stablization of DC Voltage Supplies[b] -

RCA Type	E_b V	I_k mA	$\triangle E_b$ max V	Base	Terminal Diagram
VOLTAGE-REGULATOR (VR) TYPES					
OA2	150	5 to 30	6	7-Pin Min.	5BO
OA2WA	For data, refer to Military Specification				5BO
OA3	75	5 to 40	6.5	Octal	4AJ
OA3A[c]	75	5 to 40	6.5	Octal	4AJ
OB2	105	5 to 30	4	7-Pin Min.	5BO
OB2WA	For data, refer to Military Specification				5BO
OC2	75	5 to 30	4.5	7-Pin Min.	5BO
OC3	105	5 to 40	4	Octal	4AJ
OC3A[c]	105	5 to 40	4	Octal	4AJ
OD3	150	5 to 40	5.5	Octal	4AJ
OD3A[c]	150	5 to 40	5.5	Octal	4AJ
991	59	0.4 to 2	8	Candelabra 2-Contact	991
6073[d]	150	5 to 30	6	7-Pin Min.	5BO
6073/ OA2[d]	150	5 to 30	6	7-Pin Min.	5BO
6074[d]	105	5 to 30	4	7-Pin Min.	5BO

RCA Type	E_b V	I_k mA	$\triangle E_b$ max V	Base	Terminal Diagram
6074/ OB2[d]	105	5 to 30	4	7-Pin Min.	5BO
6626/ OA2WA[e]	150	5 to 30	5	7-Pin Min.	5BO
VOLTAGE-REFERENCE TYPES (For Exceptional Voltage Stability)					
5651A[f]	85.5	1.5 to 3.5	3	7-Pin Min.	5BO
5651WA	For data, refer to Military Specification				5BO
5783	86	1.5 to 3.5	3	Submin.	5783

RCA Type	E_f/I_f V/A	Max[g] Rating I_b mA	r_p[g] Ω	Base	Terminal Diagram
SERIES-VOLTAGE-REGULATOR TYPES (For High-Current Applications)					
6AS7G	6.3/2.5	125	280	Octal	8BD
6080	6.3/2.5	125	280	Octal	8BD
6080WA	6.3/2.5	125	280	Octal	8BD
6082	26.5/0.6	125	280	Octal	8BD
6336A	6.3/5	400	200	Octal	8BD

[b] For voltage-regulation applications requiring a relatively constant dc output voltage across a load independent of load and line-voltage variations.

[c] Types OA3A, OC3A, and OD3A are similar electrically to their respective prototypes, OA3, OC3, and OD3, but are 1-1/16" shorter and utilize a straight tubular bulb, and are, therefore, more compact.

[d] Types 6073 and 6073/OA2, 6074 and 6074/OB2 are similar to their prototypes OA2 and OB2, respectively, but are intended for applications critical as to mechanical shock (up to 500g) and vibration (up to 2.5 g).

[e] Where voltage repeatability is critical.

[f] During the first 300 hours of operation at I_k = 2.5 mA, the variation of dc anode voltage drop from the initial value is less than 0.1%; between 300 and 1300 hours, less than 0.1% from the 300-hour value and less than 0.05% during any 100-hour period.

[g] Each section.

RCA Types for Mobile and Fixed-Station Communications (Cont'd)

Fixed-Station

Premium tube types are shown on gray background. These types are subjected to more rigorous tests and controls than other types.

- Other Types Suitable for Fixed-Station Applications -

RCA Type	E_f/I_f V/mA	Max Rating P_b W	g_m μmho	Base	Terminal Diagram
6AU6WB	For data, refer to Military Specification				7BK Diagram 2
6J6WA	For data, refer to Military Specification				7BF
12AT7WA	For data, refer to Military Specification				9A
12AT7WB	For data, refer to Military Specification				9A
407A	40/50 20/100	1.35	5500	9-Pin Min.	407A
408A	20/50	1.7	5000	7-Pin Min.	7BD Diagram 2
5636	6.3/150	1.1	3200	Submin.	8DC Diagram 1
5639	6.3/450	4	9000	Submin.	8DE
5654	6.3/175	1.85	5100	7-Pin Min.	7BD Diagram 2
5670	6.3/350	1.35	5500	9-Pin Min.	8CJ
5686	6.3/350	8.25	3100	9-Pin Min.	9G
5718	6.3/150	3.3	6500	Submin.	8DK
5719	6.3/150	0.55	2300	Submin.	8DK
5725	6.3/175	1.65	3200	7-Pin Min.	7CM Diagram 2
5749	6.3/300	3	4400	7-Pin Min.	7BK Diagram 2
5750	6.3/300	1.1	-	7-Pin Min.	7CH
5751	12.6/175 6.3/350	0.8	1200	9-Pin Min.	9A
5814A	12.6/175 6.3/350	3	2200	9-Pin Min.	9A
5842/ 417A	6.3/300	4.5	25000	9-Pin Min.	9V
5847/ 404A	6.3/300	3.3	12500	9-Pin Min.	9X
5902	6.3/450	4	4200	Submin.	8DE
6005	6.3/450	11	4100	7-Pin Min.	7BZ
6021	6.3/300	1.1	5400	Submin.	8DG
6072	12.6/175 6.3/350	1.65	1750	9-Pin Min.	9A
6111	6.3/300	1.1	5000	Submin.	8DG
6112	6.3/300	0.55	2500	Submin.	8DG
6186	6.3/300	2.5	5000	7-Pin Min.	7BD Diagram 2
6189	12.6/150 6.3/300	2.75/T	2200/T	9-Pin Min.	9A
6386	6.3/350	1.5	4000	9-Pin Min.	8CJ
BEAM-DEFLECTION TYPE HAVING 2 PLATES					
7360	6.3/350	1.5	5400	9-Pin Min.	9KS

RCA Types for Other Industrial Applications

Premium tube types are shown on gray background. These types are subjected to more rigorous tests and controls than other types.

- Trigger Types (Gas-Filled) -

RCA Type	E_f/I_f V/A	Max Ratings e_{bm} V	Max Ratings $I_k(av)$ mA	Base	Terminal Diagram
THYRATRONS (For Relay-Control & Grid-Controlled-Rectifier Applications)					
Triodes					
6D4	6.3/0.25	+450	25	7-Pin Min.	5AY
884	6.3/0.6	±350	75	Octal	6Q2
Tetrodes					
2D21	6.3/0.6	+650 -1300	100	7-Pin Min.	7BN
2050	6.3/0.6	+650 -1300	100	Octal	6BS Diagram 2
2050A	6.3/0.6	+650 -1300	100	Octal	6BS Diagram 3
5663	6.3/0.15	±500	20	7-Pin Min.	6CE
5696	6.3/0.15	±500	25	7-Pin Min.	7BN
5727	6.3/0.6	+650 -1300	100	7-Pin Min.	7BN
6012	6.3/2.6	+650 -1300	500	Octal	6CO
COLD-CATHODE TYPES (For Relay-Control Applications)					
0A4G	-	±225	25	Octal	4V
1C21	-	-	25	Octal	4V
5823	-	±200	25	7-Pin Min.	4CK

RCA Types for Other Industrial Applications (Cont'd)

- Types for On-Off Control Applications -

(Involving Long Periods of Operation under Cutoff Conditions)

RCA Type	E_f/I_f V/mA	Max Ratings $I_{k(av)}$ mA	Max Ratings P_b W	g_m μmho	Base	Terminal Diagram
6AS6	6.3/175	18	1.7	3200	7-Pin Min.	7CM Diagram 2
5844	6.3/300	9	0.5	3400	7-Pin Min.	7BF
5915	6.3/300	20	1	2000	7-Pin Min.	7CH
5963	12.6/150 6.3/300	20	2.5	3200	9-Pin Min.	9A
5964	6.3/450	15	1.5	6000	7-Pin Min.	7BF
5965	12.6/225 6.3/450	16.5	2.4	6500	9-Pin Min.	9A
6197	6.3/650	50	7.5	11000	9-Pin Min.	9BV

RCA Type	E_f/I_f V/mA	Max Ratings $I_{k(av)}$ mA	Max Ratings P_b W	g_m μmho	Base	Terminal Diagram
6211	12.6/150 6.3/300	16	1	3600	9-Pin Min.	9A
6350	12.6/300 6.3/600	45	4	4600	9-Pin Min.	9CZ
6814	6.3/150	22	2.2	6000	Submin.	8DK
6887	6.3/200	$-e_{bm}$ = 360 V $I_{o(av)}$ = 10 mA			7-Pin Min.	6BT
6922/ E88CC	6.3/300	20	1.5	12500	9-Pin Min.	9AJ
7044	12.6/450 6.3/900	50	4.5	12000	9-Pin Min.	9H

- Other Special Applications -

RCA Type	E_f/I_f V/mA	Max Rating P_b W	g_m μmho	Base	Terminal Diagram
INDICATOR-TYPE ELECTRON-RAY TUBE					
1629	12.6/150	-	-	Octal	7AL
6977	1.0/30	-	-	Submin.	6977
LOW-MICROPHONIC-AMPLIFIER TYPES					
1612	6.3/300	1.5	1100	Octal	7T
1620	6.3/300	0.75	1225	Octal	7R
MECHANO-ELECTRONIC TRANSDUCER					
5734	6.3/150	0.4	275	4-Lead	5734
PENTAGRID CONVERTER					
12SY7	12.6/150	1	-	Octal	8R
INTERMEDIATE-LOSS, MICANOL-BASE TYPES (Loss Factor < 0.1 per ASTM D-150-59T)					
5R4GYB	5/2000	For added data, see p.10		Octal	5T

RCA Type	E_f/I_f V/mA	Max Rating P_b W	g_m μmho	Base	Terminal Diagram
6AG7Y	6.3/650	9	11000	Octal	8Y
6SJ7Y	6.3/300	2.5	1650	Octal	8N
VOLTAGE AMPLIFIERS					
6AC7W	6.3/450	3.3	9000	Octal	8N
6AH6WA	6.3/450	3.3	9000	7-Pin Min.	7BK Diagram 1
6AS6	6.3/175	1.7	3200	7-Pin Min.	7CM Diagram 2
12SW7	12.6/150	2.5	1900	Octal	8Q
12SX7GT	12.6/300	2.5	2600	Octal	8BD
5687	12.6/450 6.3/900	4.2	5400	9-Pin Min.	9H
6688A	6.3/300	3	16500	9-Pin Min.	9EQ
8628 Nuvistor	6.3/150	0.3	3100	5-Pin Nuvistor	12AQ

Key to Abbreviations, Quantity Symbols, & Unit Symbols

Abbreviation	Term
AC	Alternating Current
af	Audio Frequency
DC	Direct Current
if	Intermediate Frequency

Abbreviation	Term
max	Maximum
P	Pentode Unit
rf	Radio Frequency
T	Triode Unit

Abbreviation	Term
uhf	Ultra-High Frequency (300 to 3000 MHz)
vhf	Very High Frequency (30 to 300 MHz)

Quantity Symbol	Physical Quantity
E_b	DC Plate Voltage (Vacuum tubes) DC Anode Voltage (Gas-filled tubes) DC Anode Voltage Drop (Voltage-regulator tubes and trigger tubes)
$\triangle E_b$	Regulation (Over specified range of I_k)
e_{bm}	Peak Plate Voltage (Vacuum tubes) Peak Anode Voltage (Gas-filled tubes)
E_f	DC or RMS AC Heater Voltage (Bogey value) DC or RMS AC Filament Voltage (Bogey value)
g_m	Transconductance (Mutual conductance)

Quantity Symbol	Physical Quantity
I_b	DC Plate Current
I_f	DC or RMS AC Heater Current (Bogey value) DC or RMS AC Filament Current (Bogey value)
I_k	DC Cathode Current
$I_{k(av)}$	Average Cathode Current
$I_{o(av)}$	Average Output (Rectified) Current
P_b	Plate Dissipation
r_p	Plate Resistance

Unit Symbol	Unit
A	Ampere(s)
g	Gravitational-Acceleration Unit(s) (32 ft/s^2)
kHz	Kilohertz

Unit Symbol	Unit
mA	Milliampere(s)
MHz	Megahertz
MΩ	Megohm(s)

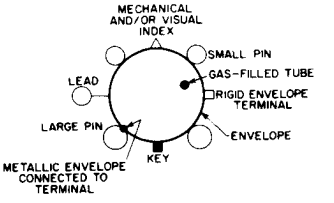
Unit Symbol	Unit
V	Volt(s)
W	Watt(s)
μmho	Micromho(s)

Unit Symbol	Unit
Ω	Ohm(s)
°C	Degree(s) Celsius
%	Per Cent

Key to Terminal Diagrams

Terminal Diagrams, unless otherwise specified, are BOTTOM VIEWS which show base pins or leads viewed from base end of tube. Rigid envelope terminals are shown in their approximate position on tube envelope.

GRAPHIC SYMBOLS



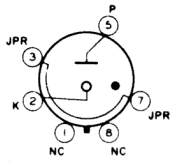
LETTER COMBINATIONS

DJ_A = Deflecting Electrode A
DJ_B = Deflecting Electrode B
F = Filament End (Unpolarized)
F^+ = Filament End (Positive only)
F^- = Filament End (Negative only)
F_M = Filament Tap
G = Grid
G_1, G_2, etc = Grid No.1, Grid No.2, etc.
H = Heater End (Unpolarized)
H_A = Heater-End A
H_B = Heater End B
H_M = Heater Tap
IC = Do Not Use
IS = Internal Shield (Electrostatic)
JPR = Jumper End
K = Cathode
LC = May be used only under Limited Conditions specified in accompanying Note
NC = No Internal Connection
P = Plate (Vacuum tubes) Anode (Gas-filled tubes)
P_A = Plate A
P_B = Plate B
RCJ = Ray-Control Electrode
S = Metal Shell
STR = Starter
TA = Fluorescent Target

SUBSCRIPTS FOR MULTIUNIT TYPES

B = Beam Power Unit
D = Diode Unit
HP = Heptode Unit
HX = Hexode Unit
P = Pentode Unit
T = Triode Unit
TR = Tetrode Unit
1,2,3,etc. = No.1, No.2, No.3, etc.

Terminal Diagrams



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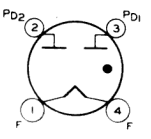

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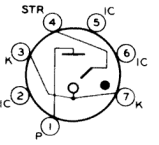

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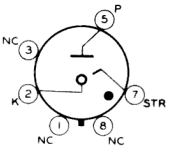

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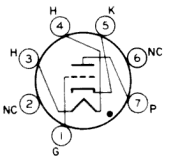

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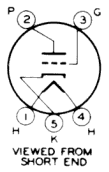

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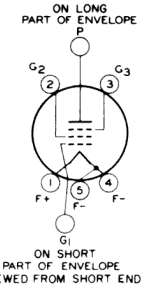

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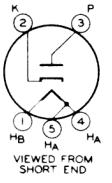

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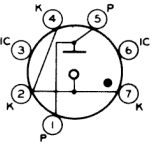

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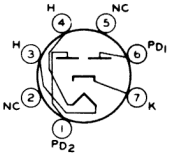

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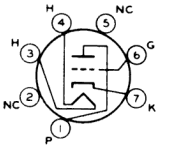

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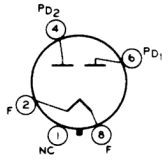

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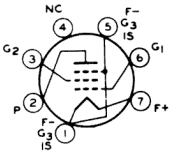

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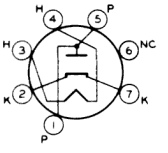

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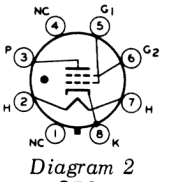


Diagram 2
6BS

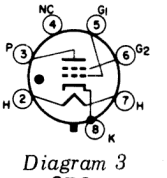
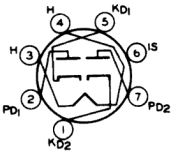


Diagram 3
6BS



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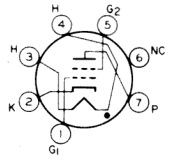

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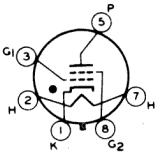

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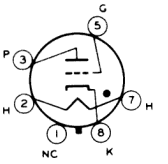

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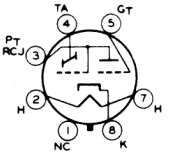

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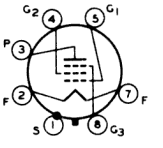
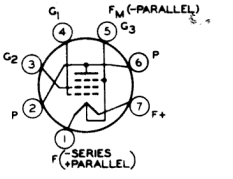


7AW



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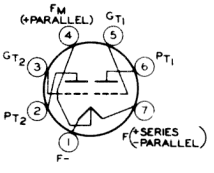

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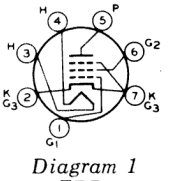
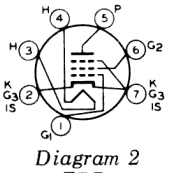


Diagram 1
7BD



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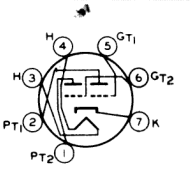

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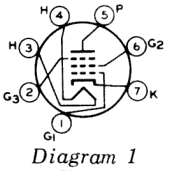

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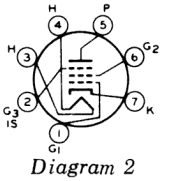

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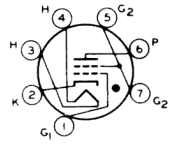

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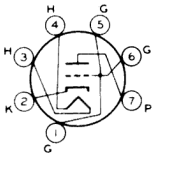

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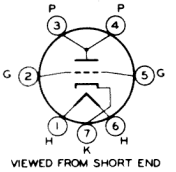
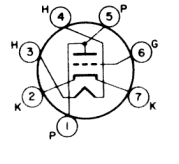


VIEWED FROM SHORT END
7BR



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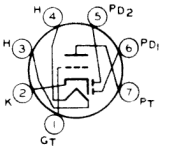

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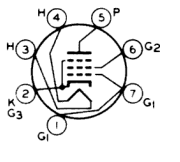

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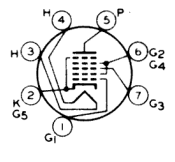

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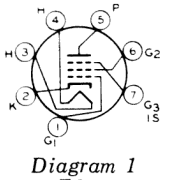

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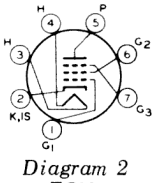
7CM



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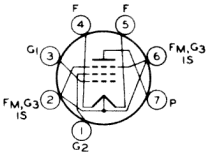

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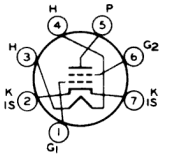
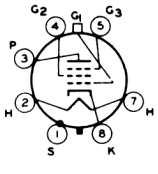


7EW

Terminal Diagrams (Cont'd)



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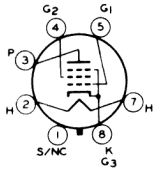

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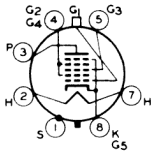

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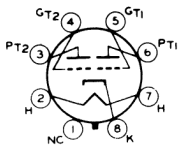

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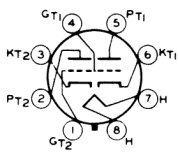

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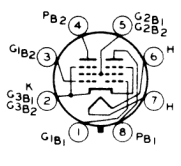

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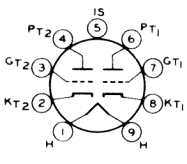

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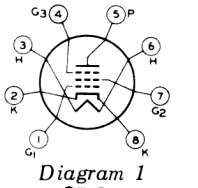

Diagram 1

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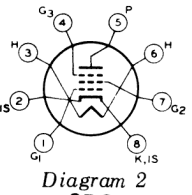
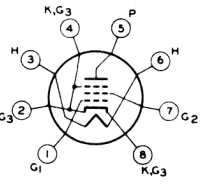


Diagram 2

8DC



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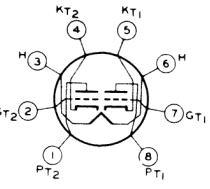

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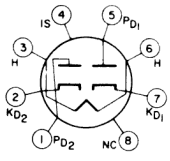

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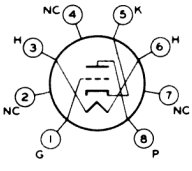

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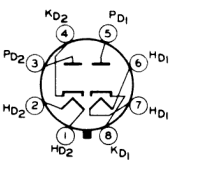

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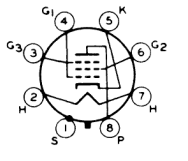

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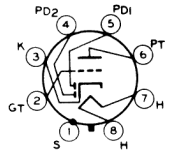

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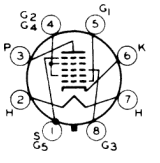

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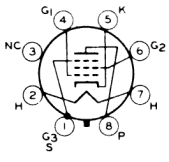

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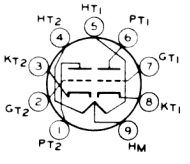

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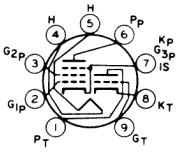

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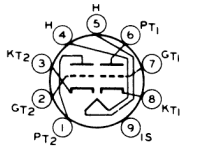

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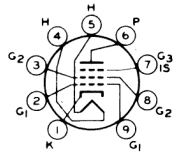

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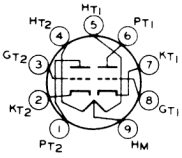

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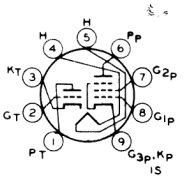

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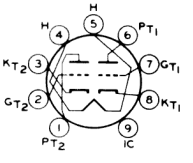

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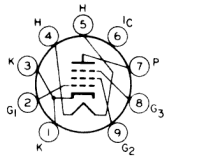

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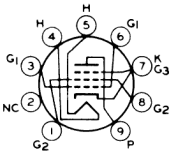

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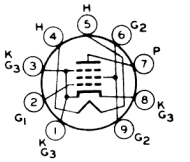

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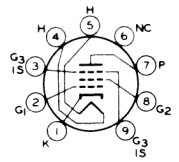

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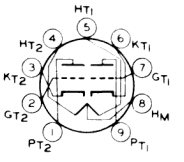

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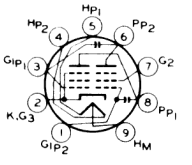

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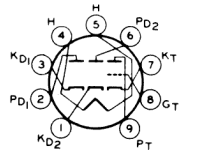

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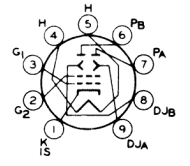

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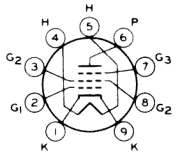

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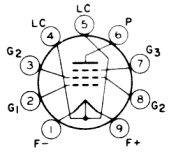
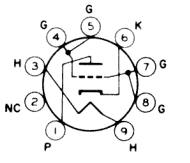


See Note 1

9PB



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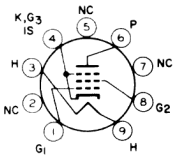

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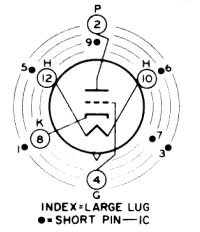
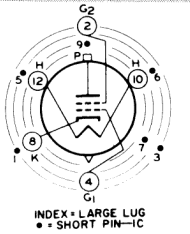


INDEX = LARGE LUG
● = SHORT PIN—IC

12AQ



INDEX = LARGE LUG
● = SHORT PIN—IC

12AS

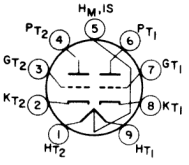
INDEX = LARGE LUG
● = SHORT PIN—IC

12CT

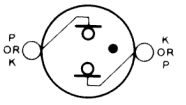
12EU

Note 1: Pins 4 and 5 may be connected to ground through a capacitor to minimize absorption of rf power in filament circuit.

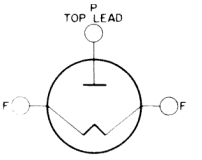
Terminal Diagrams (Cont'd)



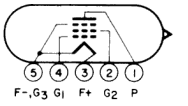
TYPE 407A



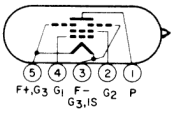
TYPE 991



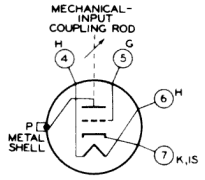
TYPE 5642



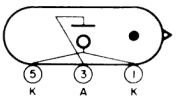
TYPE 5672



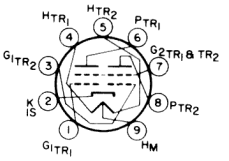
TYPE 5678



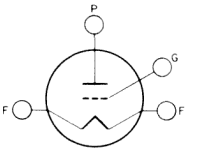
TYPE 5734



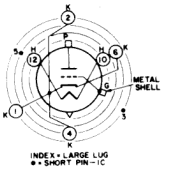
TYPE 5783



TYPE 6360



TYPE 6977



TYPE 8808

Socket & Connector Information

The sockets and connectors listed below by manufacturer's or distributor's part number are designed to mate, respectively, with the bases and caps utilized on the RCA Industrial Receiving-Type Tubes described in this catalog. Sockets and connectors having mechanical and electrical characteristics comparable to those listed below may be available from other component manufacturers.

BASE	SOCKET				
	Description		Manufacturer or Distributor and Part No.		
	Application	Mounting	Cinch Mfg. Co.[a]	Cinch-Jones Sales Division[b] Distributors	Industrial Electronic Hardware Corp.[c]
5-Pin Nuvistor	General-Purpose Type	Crimp Mounting	133 65 10 001	5NS	MSN 0905-1 MSN 0905-2 MSN 0905-3
		Flange Mounting	133 65 10 003	5NS-1	–
		Printed Board ("Stand-off")	133 65 10 009	5NS-2	–
	UHF Heat-Dissipating Type	Crimp Mounting	133 65 10 041	5NS-3	–
6-Pin Nuvistor Type 8808	UHF Heat-Dissipating Type	Crimp Mounting	133 67 90 040	5NS-4	–
7-Pin Miniature	Miniature 7-Contact		Generally available from your local RCA Distributor		
9-Pin Miniature	Miniature 9-Contact				
Octal	Octal 8-Contact				
5-Pin Acorn	James Millen Mfg. Co., Inc.[d]		33105 (Polystyrene) or 3305 (Steatite)		
Small 4-Pin	E.F. Johnson Company[e]		122-224-1 (Standard), 122-224-100 (Industrial), or 122-224-200 (Military)		
Small 5-Pin	E.F. Johnson Company[e]		122-225-1 (Standard) or 122-225-200 (Military)		
Candelabra 2-Contact	James Millen Mfg. Co., Inc.[d]		33991 (Phenolic) or 33992 (Low-loss mica-filled phenolic)		

Cap	Connector	
Miniature	Cinch Mfg. Co.[a] 6005 or 422 03 22 017, 6014 or 422 03 22 024, or equivalent "1/4-inch" connector	
Nuvistor Type 8808	For Distributed-Constant Circuit	International Electronic Research Corp.[f] Therma-Link Retainer Part No. TXBE-032-031G
	For Lumped-Constant Circuit	Wakefield Engineering, Inc.[g] Semiconductor Cooler Type NF207

[a] 1026 South Homan Avenue, Chicago, Illinois 60624.
[b] Cinch-Jones Sales Division of Cinch Mfg. Co.
[c] 109 Prince Street, New York, N.Y. 10012.
[d] 150 Exchange Street, Malden, Massachusetts 02100.
[e] 1921 Tenth Avenue, Waseca, Minnesota 56093.
[f] 135 West Magnolia Blvd., Burbank, Calif. 91502.
[g] 139 Foundry St., Wakefield, Mass. 01880.

RCA Industrial Receiving Types vs Prototypes

RCA INDUSTRIAL RECEIVING TYPE●	PROTO TYPE	RCA INDUSTRIAL RECEIVING TYPE●	PROTO TYPE
OA2WA	OA2	5915	6BE6
OA3A	OA3	5963	12AU7
OB2WA	OB2	5964	6J6
OC3A	OC3	6005	6AQ5
OD3A	OD3	6005/6AQ5W	6AQ5
2D21W	2D21	6005/6AQ5W/6095	6AQ5
3B4WA	3B4	6072	12AY7
5R4GYB	5R4GY	6073	OA2
6AC7W	6AC7	6073/OA2	OA2
6AG5WA	6AG5	6074	OB2
6AG7Y	6AG7	6074/OB2	OB2
6AH6WA	6AH6	6080	6AS7G
6AU6WB	6AU6	6080WA	6AS7G
6BA6W	6BA6	6082	6AS7G
6DJ8/ECC88	6DJ8	6101	6J6
6J4WA	6J4	6101/6J6WA	6J6
6J6WA	6J6	6136	6AU6
6SJ7Y	6SJ7	6186	6AG5
6X4W	6X4	6186/6AG5WA	6AG5
12AT7WA	12AT7	6189	12AU7
12AT7WB	12AT7	6189/12AU7WA	12AU7
407A	2C51	6197	6CL6
408A	6AK5	6201	12AT7
1612	5L7	6202	6X4
1613	6F6	6206	5899
1620	6J7	6211	6J6
1621	6F6	6386	2C51
1622	6L6	6417	5763
1629	6E5	6626/OA2WA	OA2
1635	6N7GT	6660/6BA6	6BA6
2050A	2050	6661/6BH6	6BH6
2076/5R4GYB	5R4GY	6662/6BJ6	6BJ6
5651A	5651	6663/6AL5	6AL5
5651WA	5651	6664/6AB4	6AB4
5654	6AK5	6669/6AQ5A	6AQ5
5654/6AK5W	6AK5	6676/6CB6A	6CB6A
5654/6AK5W/6096	6AK5	6677/6CL6	6CL6
5670	2C51	6678/6U8A	6U8A
5670WA	2C51	6679/12AT7	12AT7
5691	6SL7GT	6680/12AU7A	12AU7
5692	6SN7GT	6681/12AX7	12AX7
5693	6SJ7	6887	6AL5
5725	6AS6	6922/E88CC	6DT8
5726	6AL5	7054	12BY7A
5626/6AL5W	6AL5	7055	6AL5
5726/6AL5W/6097	6AL5	7056	6CB6A
5727	2D21	7057	6BZ7
5727/2D21W	2D21	7058	12AX7
5749	6BA6	7059	6U8A
5749/6BA6W	6BA6	7060	6AU8
5750	6BE6	7061	12AB5
5751	12AX7	7167	6CY5
5751WA	12AX7	7308	6922
5814A	12AU7	7717/6CY5	6CY5
5814WA	12AU7	7724/14GT8	14GT8
5824	25B6G	7898	12AT7
5842/417A	417A	8077/7054	12BY7A
5847/404A	404A	8532	6J4
		8532/6J4WA	6J4

Prototypes vs RCA Industrial Receiving Types

PROTO TYPE	RCA INDUSTRIAL RECEIVING TYPE●	PROTO TYPE	RCA INDUSTRIAL RECEIVING TYPE●
OA2	OA2WA,6073	6CY5	7167
	6073/OA2		7717/6CY5
	6626/OA2WA	6DJ8	6DJ8/ECC88
OA3	OA3A	6DT8	6922/E88CC
OB2	OB2WA,6074	6E5	1629
	6074/OB2	6F6	1613,1621
OC3	OC3A	6J4	6J4WA,8532,
OD3	OD3A		8532/6J4WA
2C51	407A,5670	6J6	6J6WA,5964
	5670WA,6386		6101/6J6WA
2D21	2D21W,5727		6211
	5727/2D21W	6J7	1620
3B4	3B4WA	6L6	1622
5R4GY	5R4GYB	6L7	1612
	2076/5R4GYB	6N7GT	1635
6AB4	6664/6AB4	6SJ7	5693
6AC7	6AC7W	6SL7GT	5691
6AG5	6AG5WA	6SN7GT	5692
	6186/6AG5WA	6U8A	6678/6U8A
6AG7	6AG7Y		7059
6AH6	6AH6WA	6X4	6X4W,6202
6AK5	408A,5654	12AB5	7061
	5654/6AK5W	12AT7	12AT7WA
	5654/6AK5W/6096		12AT7WB
6AL5	5726		6201
	5726/6AL5W		6679/12AT7
	5726/6AL5W/6097		7898
	6663/6AL5	12AU7	5814A,5814WA
	6887,7055		5963
6AQ5	6005		6189/12AU7WA
	6005/6AQ5W		6680/12AU7WA
	6005/6AQ5W/6095	12AX7	5751,5751WA
	6669/6AQ5A		6681/12AX7
6AS6	5725		7058
6AS7G	6080,6080WA	12AY7	6072
	6082	12BY7A	7054
6AU6	6AU6WB,6136		8077/7054
6AU8	7060	14GT8	7724/14GT8
6BA6	6BA6W,5749	25B6G	5824
	5749/6BA6W		
	6660/6BA6	404A	5847/404A
6BE6	5750,5915	417A	5842/417A
6BH6	6661/6BH6	2050	2050A
6BJ6	6662/6BJ6	5651	5651A,5651WA
6BZ7	7057	5763	6417
6CB6A	6676/6CB6A	5899	6206
	7056	6922	6922/E88CC
6CL6	6197		7308
	6677/6CL6		

● These types may differ from their prototypes in electrical and/or mechanical characteristics, physical structure, or types of tests to which they are subjected. The data should, therefore, be checked before replacing a type in the prototype column with its corresponding type.

Interchangeability List

DOMESTIC OR FOREIGN TYPES vs. RCA REPLACEMENT TYPES
In numerical-alphabetical-numerical sequence of TYPES TO BE REPLACED

TYPE TO BE REPLACED	RCA TYPE FOR USE AS REPLACEMENT	
	Direct[a]	Similar[b]
OA2	OA2	OA2WA
		OD3
		OD3A
		6073
		6073/OA2
		6626/OA2WA
OA2WA	OA2WA	OA2
		OD3
		OD3A
		6073
		6073/OA2
		6626/OA2WA
OA3	OA3,OA3A	OC2
OA3/VR75	OA3,OA3A	OC2
OA3A	OA3A	*OA3*
		OC2
OB2	OB2	OB2WA
		OC3
		OC3A
		6074
		6074/OB2
OB2WA	OB2WA	OB2
		OC3
		OC3A
		6074
		6074/OB2
OC2	OC2	OA3
		OA3A
OC3	OC3,OC3A	OB2
		OB2WA
		6074
		6074/OB2
OC3/VR105	OC3,OC3A	OB2
		OB2WA
		6074
		6074/OB2
OC3A	OC3A	OB2
		OB2WA
		OC3
		6074
		6074/OB2
OC3W		OB2
		OB2WA
		OC3
		OC3A
		6074
		6074/OB2
OD3	OD3,OD3A	OA2
		OA2WA
		6073
		6073/OA2
OD3/VR150	OD3,OD3A	OA2
		OA2WA
		6073
		6073/OA2
OD3A	OD3A	OA2
		OA2WA
		OD3
		6073
		6073/OA2
OD3W		OA2
		OA2WA
		OD3
		OD3A
		6073
		6073/OA2
1F2	1L4	
2C51	5670	
2D21	2D21	5727
2D21W	2D21W	2D21
		5727
5R4GY	5R4GYB	
5R4GYA	5R4GYB	
6AC7Y	6AC7W	
6AG5WA		6186
6AK5W		5654
6AL5W	5726	6663/6AL5
6AQ5W	6005	6669/6AQ5A
6AS6	6AS6	5725
6AS7G	6AS7G	6080
		6080WA
6AS7GYB		6AS7G,6080
		6080WA
6AU6WA	6AU6WB	
6BA6W		5749
6CY5	7717/6CY5	
6J4	6J4	8532
6J4WA		6J4
6J4WB		6J4
		8532
6J6WA	6J6WA	5964
6L4	6F4	
6Q5G	884	
6SJ7WGT		6SJ7Y,5693
6SJ7Y	6SJ7Y	5693
6SL7WGT		5691
6SN7GTY		5692
6X4	6202	6X4W
12AU7WA		5814A,6189
14GT8	7724/14GT8	
25B6G	5824	
26FZ6		26A6
108C1	OB2	
150C1	OA2	
150C2	OA2	
150C3	OD3	
	OD3A	
274A		5R4GYB
274B	5R4GYB	
301A		83
310B		1620
313C		1C21
348A		1620
359A		1C21
395A		5823
403A		5654
403B		5654
404A		5847/404A
417A	5842/417A	
421A		*6AS7G*,6080
		6080WA
423A		5651A
		5651WA
546		5696
1266		5823
1603		1620
2050	2050	2050A
2050A	2050A	2050
5590/401B		5654
5591/403B		5654
5636A		5636
5651	5651A	5651WA
5651A	5651A	5651WA
5651WA	5651WA	5651A
5654/ 6AK5W/ 6096		5654
5659		12A6
5663	5663	5696
5670WA		5670
5693	5693	6SJ7Y
5718A	5718	
5719A	5719	
5725		6AS6
5726/6AL5W		5726
5726/ 6AL5W/ 6097		5726
5727	5727	2D21
5727/2D21W		2D21
5749/6BA6W		5749
5751WA		5751
5812		5763
5814	5814A	
5814WA		5814A
5840A		5840
5842	5842/417A	
5844		5964
5897	5718	
5898	5719	
5899A	5899	
5900	5899	
5901	5840	
5915A		5915
5920		5964
		6J6WA
5963	5963	5814A
5964	5964	6J6WA
6101		6J6WA
5965A		5965
90C5/ 6AQ5W		6005
6005/ 6AQ5W/ 6095		6005
6012	6012	2D21
		5727
6028	408A	
6028/408A	408A	
6057		5751
6058		5726
6062		5763
6067		5814A
6073	6073	OA2
		OA2WA
		OD3
		OD3A
		6073/OA2
6073/OA2	6073/OA2	OA2
		OA2WA
		OD3
		OD3A
		6073
6074	6074	OB2
		OB2WA
		OC3
		OC3A
		6074/OB2
6074/OB2	6074/OB2	OB2
		OB2WA
		OC3
		OC3A
		6074
6080	6080	6080WA
		6AS7G
6080WA	6080WA	6080
		6AS7G
6082A		6082
6085		5692
6094		6005
6095		6005
6096		5654
6097		5726
6099		5964
6101		5964
6101/6J6WA		5964
6136		6AU6WB
6140/423A		5651WA
6180		5692
6186/ 6AG5WA		6186
6189/ 12AU7WA		5814A 5963

For footnotes to the interchangeability list, see page 19.

Interchangeability List (Cont'd)

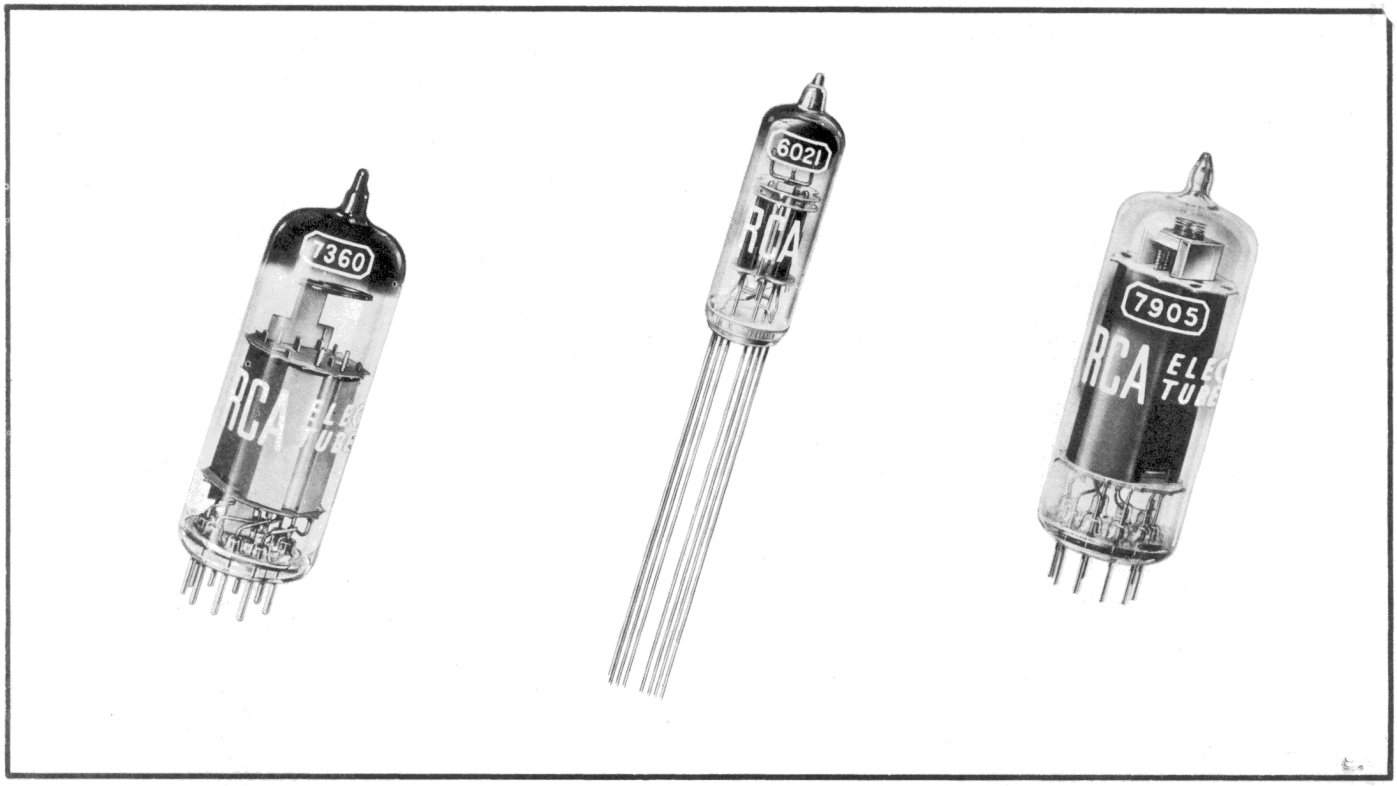
DOMESTIC OR FOREIGN TYPES vs. RCA REPLACEMENT TYPES
In numerical-alphabetical-numerical sequence of TYPES TO BE REPLACED

TYPE TO BE REPLACED	RCA TYPE FOR USE AS REPLACEMENT	
	Direct[a]	Similar[b]
6201		12AT7WA
6211A		6211
6336	6336A	
6337		6336A
6360	6360A	
6414		5965
6417	6417	7551
6486		5725
6486A		5725
6520		6AS7G
6528		6080
6626	6626/OA2WA	OA2WA
		OA2
		OD3
		OD3A
6626/ OA2WA	6626/ OA2WA	*OA2WA*
		OB2
		OC3
		OC3A
6660	6660/6BA6	
6661	6661/6BH6	
6662	6662/6BJ6	
6663	6663/6AL5	
6664	6664/6AB4	
6669	6669/6AQ5A	
6676	6676/6CB6A	
6677	6677/6CL6	
6678	6678/6U8A	
6679	6679/12AT7	
6680	6680/12AU7A	
6681	6681/12AX7A	
6687		5915
6829		5965
7036		5915
7054	8077/7054	
7062		5965
7079		6111
7105		6080
		6080WA
		6AS7G
7244		6J6WA
7244A		6J6WA
7245		6J4,8532
7370		5687
7701		7551
7717	7717/6CY5	
7724	7724/14GT8	
7729		6681/12AX7A
7731		6678/6U8A
7733		5814A
		5963
8077	8077/7054	7054
8077/7054	8077/7054	7054
A1834	6AS7G	
AA91E	5726	
AG5210	OB2	
AG5211	OA2	
ASG5121	2D21	
CC81E	12AT7WA	
CCa	6922/E88CC	
CV216	OD3,OD3A	
CV449	5651A	
CV475	5899	
CV477	5899	
CV618		83
CV686	OC3,OC3A	
CV752	OA4G	
CV807	3A4	
CV1758	1L4	
CV1832	OA2	
CV1833	OB2	
CV1992	OA4G	
CV2129	5763	
CV2240		3B4WA
CV2241	5642	
CV2390	3A4	
CV2466	6939	
CV2492	6922/E88CC	
CV2522	6AS6	
CV2573	5651A	
CV2642	5842/417A	
CV2662	5639	
CV2742	1L4	
CV2795	1L4	
CV2876	5727	
CV2984	6080	
CV3512	5696	
CV3789	5842/417A	
CV3798	OA3,OA3A	
CV3928	5636	
CV3929	5840	
CV3930	5718	
CV3986	6021	
CV4008	5719	
CV4009	5749	
CV4011	5725	
CV4016	5814A	
CV4017	5751	
CV4018	5727	
CV4020	OA2WA	
CV4024	12AT7WA	
CV4025	5726	
CV4028	OB2WA	
CV4029	5902	
CV4039	5763	
CV4048	5651WA	
CV4100	OA2WA	
CV4101	OB2WA	
CV5122	5823	
CV5186	5651A	
DCC90	3A5	
DF92	1L4	
DL93	3A4	
DL98	3B4WA	
DY70	5642	
E88CC	6922/E88CC	
E91AA	5726	
E91N	5727	
E95F	5654	
E182F	5847/404A	
E1485	3A4	
E1955	2D21	
EAA901	5726	
EAA9015	5726	
EC70	5718	
EC71	5718	
ECC70	6021	
ECC88	6DJ8/ECC88	
ECC230	6080	
EF71	5899	
EF72	5840	
EF730	5636	
EF731	5899	
EF732	5840	
EF905	5654	
EL71	5902	
EN91	2D21	
EN92	5696	
HD51	OA2	
HD52	OB2	
KD21	OA3,OA3A	
KD24	OC3,OC3A	
KD25	OD3,OD3A	
M8079	5726	
M8096	5763	
M8162	12AT7WA	
M8196	5725	
M8204	5727	
M8212	5726	
M8223	OA2WA	
M8224	OB2WA	
M8245	6005	
QA2408	5692	
QE03/10	5763	
QQE02/5	6939	
QQV02-6	6939	
QS150/40	OD3,OD3A	
QS1205	OA3,OA3A	
QS1206	OC3,OC3A	
QS1207	OA2	
QS1208	OB2	
QS1210	OA2WA	
QS1211	OB2WA	
QS2404	5726	
QV03-12	5763	
RL21	2D21	
RL1267	OA4G	
S856	OA2	
S860	OB2	
VT138	1629	
VT139	OD3,OD3A	
VT202	9002	
VT203	9003	
WT210-0001	2D21	5727
WT210-0003	884	
WT210-0011	OC3,OC3A	
WT210-0018	OD3,OD3A	
WT210-0019	83	
WT294	OD3,OD3A	
WT301	83	
WTT-132	OA4G	
Z300T	OA4G	
Z900T	5823	

[a] The RCA types in this column can be used, in most applications, as a replacement for the corresponding TYPE TO BE REPLACED without a component, circuit, and/or equipment modification.

[b] The RCA types in this column may be used as a replacement for the corresponding TYPE TO BE REPLACED but, because of mechanical and/or electrical differences may, in some circuits and/or equipment, require a component, circuit, and/or equipment modification. Technical data for both types should be compared to determine the degree of interchangeability.

When more than one RCA replacement type is shown for a particular type, the nearest type for general replacement purposes is indicated in *italics*. NOTE: In many cases the application (because of its specific requirements) will determine the replacement type to be used.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RCA
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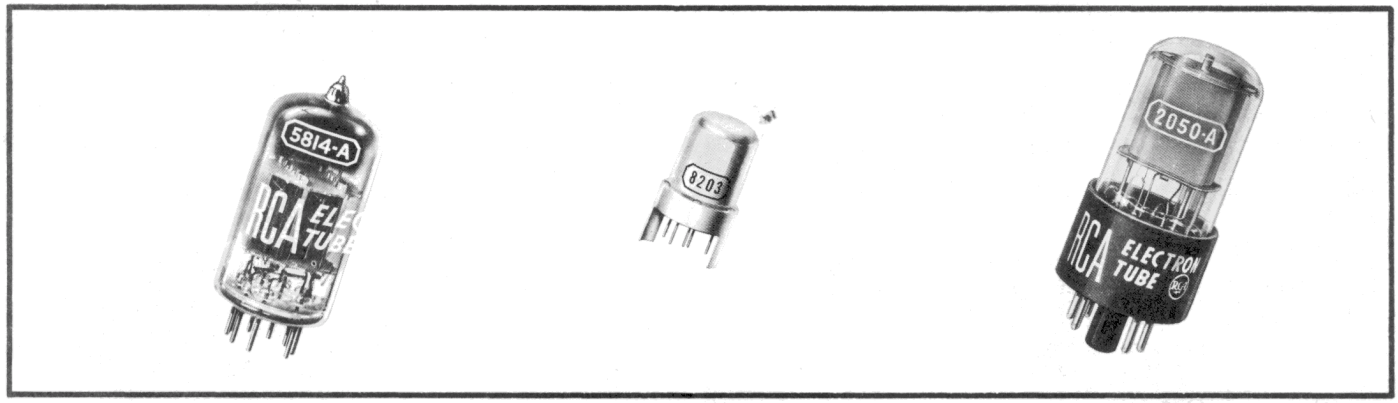
RCA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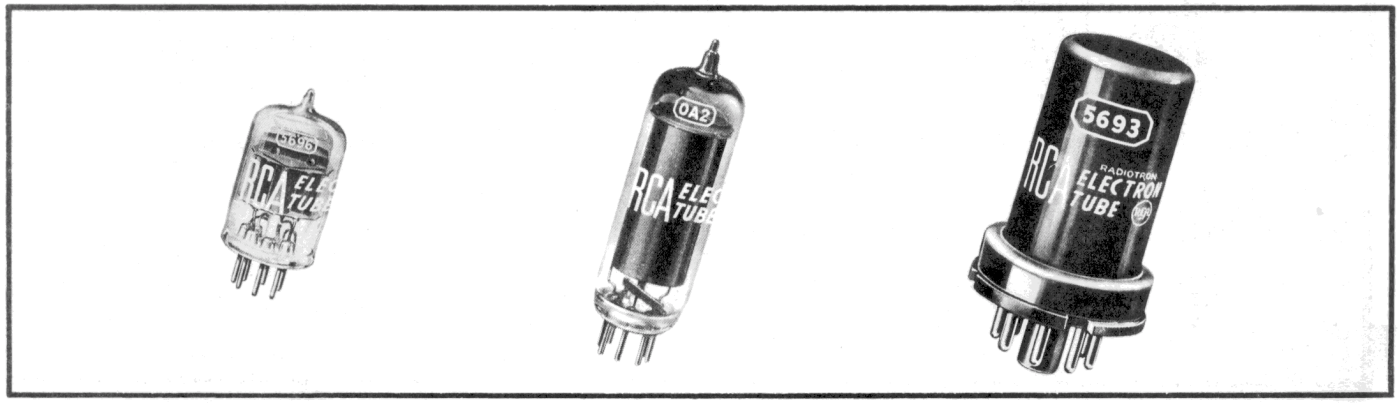
RCA
ELECTRON TUBE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RADIOTRON
RCA
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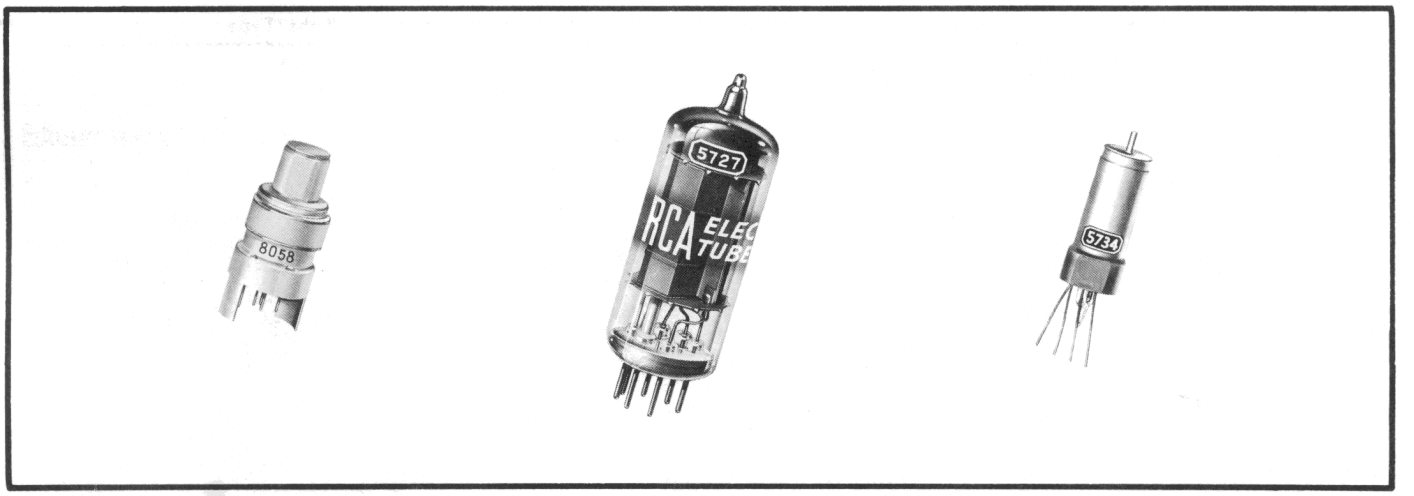
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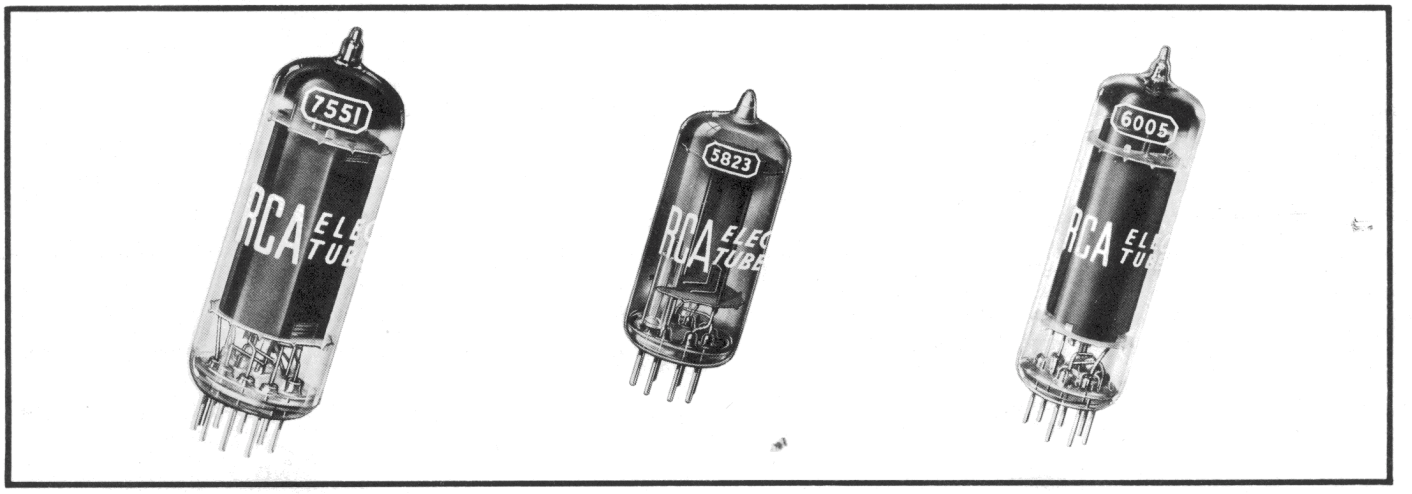
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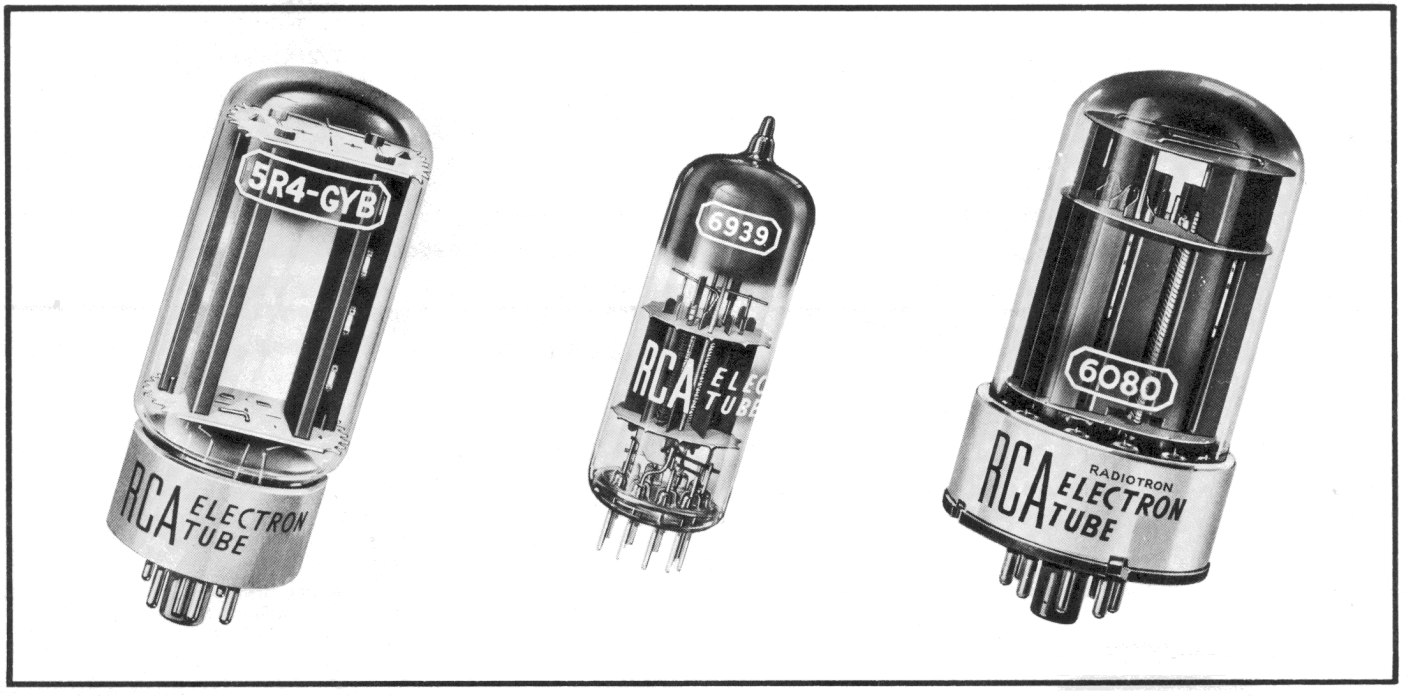
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6939
RCA
6080
RADIOTRON
RCA ELECTRON TUBE

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▲ Can also be supplied to Military Specifications. A copy of the applicable Military Specification may be obtained from: Specification Division, Naval Supply Depot, 5801 Tabor Ave., Philadelphia, Pa. 19120

* Premium type.

■ Sales limited to extent of inventory.

□ For critical applications, see OA2WA.

□□ For critical applications, see OB2WA.

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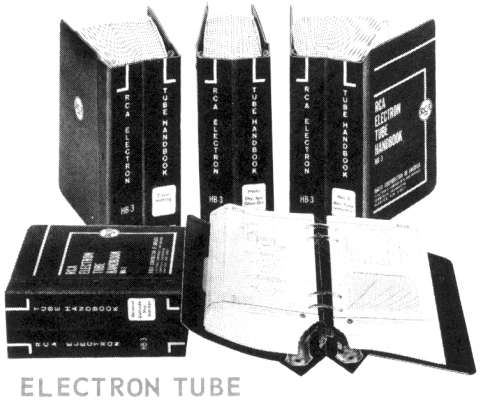

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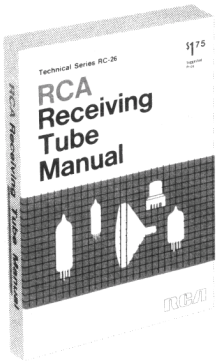
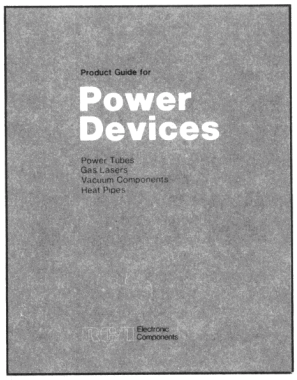
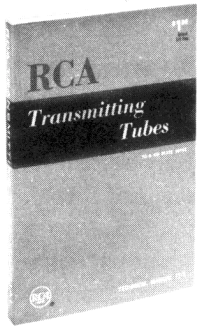


RCA RECEIVING TUBE
MANUAL RC-26



POWER DEVICES
PWR-506C



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TUBE MANUAL TT-5

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