

Application Guide

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Balanced Mixer | 24. Mixer |
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Direct-Drive (RF) | 25. Modulator |
| 5. Cathode Drive (RF)
(Grounded Grid) | 26. Multivibrator |
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1 AF Amplifier

CLASS - A₁

Twin Diode - Med.-Mu Triodes
12SW7 26C6

High-Mu Triode - 5719

Power Triodes
955 5718 9002

Medium-Mu Twin Triodes
▲5670 5692 ▲6189
5687 6072

High-Mu Twin Triodes
6112 6681/12AX7A

Twin Power Triode - 3A5

Sharp-Cutoff Pentodes

6AH6WA 1620

Power Pentodes

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

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



**Electronic
Components**

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Application Guide

<p>CLASS - AB₁</p> <p>Medium-Mu Twin Triode ▲5670</p> <p>Beam Power Tubes</p> <p>1614 6669/6AQ5A 1619 7551 ▲6005 7558</p> <p>Twin Beam Power Tube 26A7GT</p> <p>CLASS - B</p> <p>Twin Power Triode - 1635</p> <p>2 Automatic Gain Control Remote-Cutoff Pentode ▲5749</p> <p>3 Balanced Modulator/ Balanced Mixer Beam-Deflection Tube 7360</p> <p>4 Cathode-Coupled, Direct-Drive (RF) Medium-Mu Twin Triodes 6DJ8/ECC88 6922/E88CC</p> <p>5 Cathode Drive (RF) (Grounded Grid) High-Mu Triodes 6J4 ▲8532 ■8058</p> <p>6 Cathode Follower Medium-Mu Triodes 6814 ■8056</p>	<p>Medium-Mu Twin Triodes ▲5670 6350 7044 5687 6922/E88CC 7308 5965</p> <p>7 Clipper Twin Diodes ▲5726 7055</p> <p>8 Converter Pentagrid Converters 12SY7 26D6 5750</p> <p>9 DC Amplifier Sharp-Cutoff Pentode - 5693 Medium-Mu Twin Triode - 5692 High-Mu Twin Triode - 5691</p> <p>10 Delay Circuit Sharp-Cutoff Pentodes 6AS6 ▲5725 5636</p> <p>11 Demodulator Beam-Deflection Tube - 7360</p> <p>12 Detector Audio Twin Diode - Med.-Mu Triodes 12SW7 26C6 VHF</p> <p>Twin Diodes ▲5726 6663/6AL5 7055 5896 6887 UHF</p> <p>Diodes 9005 9006</p>
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<p>13 Driver</p> <p>Beam Power Tubes 5763 7551 7905 6417 7558</p> <p>14 Frequency Converter</p> <p>High-Mu Triode - 6664/6AB4</p> <p>High-Mu Twin Triode 6679/12AT7</p> <p>Beam-Deflection Tube - 7360</p> <p>15 Frequency Divider</p> <p>Medium-Mu Twin Triodes ▲5670 5964 6350 5687 6211 7044 5963</p> <p>Power Pentode - 6197</p> <p>16 Frequency Multiplier</p> <p style="text-align: center;">FREQUENCY DOUBLER</p> <p>High-Mu Triode ■8808</p> <p>Power Triode ■8203 ■8627</p> <p>Twin Tetrode - 6360A</p> <p>Power Pentodes 7054 8077/7054</p> <p>Beam Power Tubes 5763 7551 7905 6417 7558</p>	<p style="text-align: center;">FREQUENCY TRIPLER</p> <p>Beam Power Tubes 5763 6417 7905</p> <p>Twin Power Pentode - 6939</p> <p>17 Gated Amplifier</p> <p>Sharp-Cutoff Pentodes 6AS6 ▲5725 5636</p> <p>Pentagrid Amplifier - 5915</p> <p>18 Grid-Controlled Rectifier</p> <p>Triodes (Thyratron) 6D4 884</p> <p>Tetrodes (Thyratron) 2D21 2050A ▲5727 2050 5696 6012</p> <p>19 Indicator, Voltage</p> <p>Electron-Ray Tubes 1629 6977</p> <p>20 IF Amplifier</p> <p style="text-align: center;">VHF</p> <p>Medium-Mu Triodes ■7586 ■8056</p> <p>Medium-Mu Twin Triodes 5687 6922/E88CC 6386 7308</p> <p>Sharp-Cutoff Pentodes ▲6AU6WB† 6676/6CB6A ▲5654 7056</p>
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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† 7898
▲12AT7WB†

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
407A ▲6189
▲5670 6350
5687 6680/12AU7A
5692 6922/E88CC
▲5814A 7044

High-Mu Twin Triodes
▲12AT7WA† ▲5751

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<p>27 Oscillator, RF VHF</p> <p>Power Triode - ■8203</p> <p>High-Mu Triode - 6664/6AB4</p> <p>Medium-Mu Twin Triodes 407A ▲5814A 6680/12AU7A ▲5670 6111</p> <p>High-Mu Twin Triodes ▲12AT7WA† 7898 ▲12AT7WB†</p> <p>Medium-Mu Triode - Sharp-Cutoff Pentodes 6678/6UBA 7059</p> <p>Twin Tetrode - 6360A</p> <p>Beam Power Tubes 3B4WA† 5763 7558 1614 6417 7905 1619 7551</p> <p>Power Pentodes 1613 7054 8077/7054</p> <p>Medium-Mu Triode - Power Pentode 7060</p> <p>Pentagrid Converters 12SY7 26D6 5750</p> <p style="text-align: center;">UHF</p> <p>Medium-Mu Triodes 6F4 ■8056 ■8393 ■7586</p> <p>High-Mu Triodes ■7895 ■8058 ■8808</p> <p>Power Triodes 955 ■8627 9002 5718</p> <p>Medium-Mu Twin Triodes ▲6J6WA† 6021</p> <p>Sharp-Cutoff Tetrode - ■7587</p> <p>Twin Power Pentode - 6939</p>	<p>28 "On-Off" Control (Involving Long Periods of Operation Under Cutoff Conditions)</p> <p>Twin Diode - 6887</p> <p>Medium-Mu Triode - 6814</p> <p>Medium-Mu Twin Triodes 5844 5965 6922/E88CC 5963 6211 7044 5964 6350</p> <p>Sharp-Cutoff Pentode - 6AS6</p> <p>Power Pentode - 6197</p> <p>Pentagrid Amplifier - 5915</p> <p>29 Phase Inverter</p> <p>Medium-Mu Triode - 6814</p> <p>Medium-Mu Twin Triodes ▲5670 6350 5687 6680/12AU7A ▲5814A 6922/E88CC ▲6189 7044</p> <p>High-Mu Twin Triodes 5691 7058 ▲5751</p> <p>30 Pulse Amplifier</p> <p>Medium-Mu Triode - 6814</p> <p>Medium-Mu Twin Triodes ▲5670 6350 7044 5687</p> <p>31 Pulse Modulator</p> <p>Twin Diode ▲5726</p>
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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	6AN5	7054
6AG7Y	1613	8077/7054

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
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Medium-Mu Twin Triodes

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

High-Mu Twin Triode

6679/12AT7

Sharp-Cutoff Tetrodes

■7587	7717/6CY5
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Sharp-Cutoff Pentodes

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

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
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Semiremote-Cutoff Pentodes

5899	6206
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Remote-Cutoff Pentode - 9003

34 Rectifier

POWER

Full-Wave Gas Type - 83

Full-Wave Vacuum Types

5R4GYB	2076/5R4GYB
6X4W	6202

LOW CURRENT

Twin Diodes

▲5726	6663/6AL5
5896	7055

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Single Diodes			High-Mu Twin Triodes	
9005		9006	7058	7898
PULSE				
Half-Wave Vacuum Type - 5642			Medium-Mu Triode - Sharp-Cutoff Pentodes	
			7059	7258
35 Relay				
Glow-Discharge (Cold-Cathode) Tubes			Medium-Mu Triode - Power Pentode	
OA4G	1C21	5823	7060	
Triodes (Thyratron)			Sharp-Cutoff Pentode - 7056	
6D4		884	Power Pentodes	
Tetrodes (Thyratron)			7054	8077/7054
2D21	5663	▲ 5727	Beam Power Tubes	
2050	5696	6012	7061	7551
2050A			NOMINAL-6-VOLT STORAGE BATTERY SYSTEMS	
36 Sweep-Circuit Oscillator			Twin Diode - 6663/6AL5	
Triode (Thyratron) - 884			High-Mu Triode - 6664/6AB4	
37 Switching			Medium-Mu Twin Triode	
Twin Diode - 6887			6680/12AU7A	
Beam-Deflection Tube - 7360			High-Mu Twin Triodes	
38 Transducer			6679/12AT7	
Mechano-Electronic Transducer			6681/12AX7A	
5734			Medium-Mu Triode - Sharp-Cutoff Pentode	
39 Tubes Operating from Battery Supplies			6678/6U8A	
NOMINAL-12-VOLT STORAGE BATTERY SYSTEMS			Twin Tetrode - 6360A	
Twin Diode - 7055			Remote-Cutoff Pentodes	
Twin Diode - High-Mu Triode			6660/6BA6	6662/6BJ6
7724/14GT8			Sharp-Cutoff Pentodes	
Medium-Mu Twin Triode - 7057			6661/6BH6	6676/6CB6A
			Power Pentode - 6677/6CL6	
			Beam Power Tubes	
			6669/6AQ5A	7905

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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 6677/6CL6
6AN5

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/
▲OB2WA†		991	OA2WA

43 Voltage Regulator, Series

Low-Mu Twin Triodes

6AS7G ▲6080WA 6336A
6080 6082

Beam Power Tube - 5902

44 Volume Expander- Compressor

Pentagrid Mixer - 1612

▲ Premium Type. Premium types are subjected to more rigorous tests and controls than other types.

■ Nuvistor Type.

‡ For data on this type, refer to Military Specification. A copy of the applicable Military Specification may be obtained from: Specification Division, Naval Supply Depot, 5801 Tabor Avenue, Philadelphia, Pa. 19120.

Note:

For data on types in this guide which do not appear in the *Index of Types*, refer to RCA publication RIT-104G. A copy of this publication may be obtained from: RCA Commercial Engineering, Harrison, N.J. 07029.