



# SUBMINIATURE TUBES



| TYPE                  | CONSTRUCTION | TYPICAL APPLICATION | HTR or FILAMENT |           |      | TERM. CONN. | MAX. DIMENSIONS<br>Inches |             |                | PLATE VOLTS                                                        | GRID 1 VOLTS | GRID 2 VOLTS | GRID 3 VOLTS | PLATE CURR. ma. | GRID 2 CURR. ma. | AMP. FACT. | PLATE RESIST. meg. | MUT. COND. $\mu$ mhms | OUTPUT milliwatts                               | LOAD RESIST. meg. | TYPE                  |
|-----------------------|--------------|---------------------|-----------------|-----------|------|-------------|---------------------------|-------------|----------------|--------------------------------------------------------------------|--------------|--------------|--------------|-----------------|------------------|------------|--------------------|-----------------------|-------------------------------------------------|-------------------|-----------------------|
|                       |              |                     | Volts           | Ma.       | Type |             | Length                    | Width       | Thick-<br>ness |                                                                    |              |              |              |                 |                  |            |                    |                       |                                                 |                   |                       |
| CK539DX               | Pentode      | Power Amp.          | 1.25            | 15        | Fil  | 5J          | 1.25                      | .285        | .220           | 22.5                                                               | -1.4         | 22.5         |              | 0.25            | 0.075            |            | 0.25               | 300                   | 2.2                                             | 0.1               | CK539DX               |
| CK541DX               | Pentode      | Power Amp.          | 1.25            | 15        | Fil  | 5J          | 1.25                      | .285        | .220           | 30                                                                 | 0            | 30           |              | 0.25            | 0.075            |            | 0.5                | 425                   | 1.4                                             | 0.2               | CK541DX               |
| CK542DX               | Pentode      | Power Amp.          | 1.25            | 15        | Fil  | 5J          | 1.25                      | .285        | .220           | 22.5                                                               | -2.0         | 22.5         |              | 0.425           | 0.13             |            | 0.15               | 325                   | 3.75                                            | 0.05              | CK542DX               |
| CK542DXS <sup>1</sup> | Pentode      | Power Amp.          | 1.25            | 15        | Fil  | 5J          | 1.4                       | .290        | .225           | 22.5                                                               | -2           | 22.5         |              | 0.425           | 0.13             |            | 0.15               | 325                   | 3.75                                            | 0.05              | CK542DXS <sup>1</sup> |
| CK543DX               | Pentode      | Voltage Amp.        | 0.625           | 15        | Fil  | 5J          | 1.0                       | .285        | .220           | 15                                                                 | -0.625       | 15           |              | 0.005           | 0.0022           |            | 5.0                | 15                    | 20 <sup>4</sup>                                 |                   | CK543DX               |
| CK544DX               | Pentode      | Power Amp.          | 1.25            | 10        | Fil  | 5J          | 1.25                      | .285        | .220           | 30                                                                 | 0            | 30           |              | 0.135           | 0.035            |            | 1.2                | 325                   | 0.52                                            | 0.2               | CK544DX               |
| CK545DX               | Pentode      | Voltage Amp.        | 0.625           | 7.5       | Fil  | 5F          | 1.0                       | .290        | .235           | 15                                                                 | -0.625       | 15           |              | 0.0046          | 0.002            |            | 12                 | 16                    | 25 <sup>4</sup>                                 | 2.2               | CK545DX               |
| CK546DX               | Pentode      | Power Amp.          | 1.25            | 10        | Fil  | 5J          | 1.25                      | .285        | .220           | 22.5                                                               | 0            | 22.5         |              | 0.375           | 0.085            |            | 0.2                | 425                   | 1.75                                            | 0.1               | CK546DX               |
| CK547DX               | Pentode      | Power Amp.          | 1.25            | 10        | Fil  | 5J          | 1.25                      | .285        | .220           | 30                                                                 | 0            | 30           |              | 0.240           | 0.060            |            | 0.5                | 425                   | 1.35                                            | 0.2               | CK547DX               |
| CK548DX               | Pentode      | Power Amp.          | 1.25            | 10        | Fil  | 5J          | 1.25                      | .285        | .220           | 22.5                                                               | -1.4         | 22.5         |              | 0.240           | 0.060            |            | 0.25               | 300                   | 2.1                                             | 0.1               | CK548DX               |
| CK549DX               | Pentode      | Voltage Amp.        | 0.625           | 10        | Fil  | 5J          | 1.0                       | .285        | .220           | 15                                                                 | -0.625       | 15           |              | 0.0046          | 0.002            |            | 12.0               | 17                    | 27 <sup>4</sup>                                 |                   | CK549DX               |
| CK574AX <sup>1</sup>  | Pentode      | R-F Amplifier       | 0.625           | 20        | Fil  | 5E          | 1.25                      | .390        | .290           | 22.5                                                               | -0.625       | 22.5         |              | 0.125           | 0.040            |            | 1.25               | 160                   |                                                 |                   | CK574AX <sup>1</sup>  |
| CK1034                | Gas Diode    | GM Counter          |                 |           | Cold | 3A          | 2 3/8                     | Dia. = .400 |                | See Radiation Counter Tube Section for Characteristics             |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK1034                |
| CK1035                | Gas Diode    | GM Counter          |                 |           | Cold | 3A          | 1.5                       | .385        | .285           | See Radiation Counter Tube Section for Characteristics             |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK1035                |
| CK1036                | Gas Diode    | HW Rectifier        |                 |           | Cold | 5P          | 1 13/16                   | Dia. = .400 |                | See Rectifier Tube Section for Characteristics                     |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK1036                |
| CK1037                | Gas Diode    | Voltage Reg.        |                 |           | Cold | 3A          | 1.75                      | Dia. = .400 |                | See Voltage Regulator Tube Section for Characteristics             |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK1037                |
| CK1038                | Gas Diode    | Voltage Reg.        |                 |           | Cold | 3A          | 1.75                      | Dia. = .400 |                | See Voltage Regulator Tube Section for Characteristics             |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK1038                |
| CK1039                | Gas Diode    | Voltage Reg.        |                 |           | Cold | 3A          | 1.75                      | Dia. = .400 |                | See Voltage Regulator Tube Section for Characteristics             |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK1039                |
| CK1042                | Gas Diode    | HW Rectifier        |                 |           | Cold | 5N          | 2 1/8                     | Dia. = .400 |                | See Rectifier Tube Section for Characteristics                     |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK1042                |
| CK5672                | Pentode      | Power Amp.          | 1.25            | 50        | Fil  | 5F          | 1.5                       | .385        | .285           | 67.5                                                               | -6.5         | 67.5         |              | 3.25            | 1.1              |            |                    | 650                   | 65                                              | 0.020             | CK5672                |
| CK5676                | Triode       | UHF Osc.            | 1.25            | 120       | Fil  | 4B          | 1.5                       | .385        | .285           | 135                                                                | -5           |              |              | 4               |                  | 15         |                    | 1600                  |                                                 |                   | CK5676                |
| CK5677                | Triode       | UHF Osc.            | 1.25            | 60        | Fil  | 4A          | 1.5                       | .385        | .285           | 135                                                                | -5.5         |              |              | 1.9             |                  | 16         |                    | 850                   |                                                 |                   | CK5677                |
| CK5678 <sup>1</sup>   | Pentode      | R-F Amplifier       | 1.25            | 50        | Fil  | 5A          | 1.5                       | .385        | .285           | 67.5                                                               | 5 meg        | 67.5         |              | 1.8             | 0.48             |            | 1.0                | 1100                  |                                                 |                   | CK5678 <sup>1</sup>   |
| CK5697                | Triode       | Electrometer        | 0.625           | 20        | Fil  | 4C          | 1.25                      | .400        | .285           | 12                                                                 | -3           |              |              | 0.22            |                  | 2.1        |                    | 135                   | Max. Ic <sup>1</sup> = 5x10 <sup>-13</sup> amp. |                   | CK5697                |
| CK5702                | Pentode      | R-F Amplifier       | 6.3             | 200       | Htr  | 7C          | 1.5                       | Dia. = .400 |                | 120                                                                | Rk200        | 120          |              | 7.5             | 2.5              |            | 0.34               | 5000                  |                                                 |                   | CK5702                |
| CK5702WA              | Pentode      | R-F Amplifier       | 6.3             | 200       | Htr  | 7C          | 1.5                       | Dia. = .400 |                | See Reliable Cathode Type Subminiature Section for Characteristics |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK5702WA              |
| CK5703                | Triode       | UHF Osc.            | 6.3             | 200       | Htr  | 5G          | 1.5                       | Dia. = .400 |                | 120                                                                | Rk220        |              |              | 9               |                  | 25         |                    | 5000                  |                                                 |                   | CK5703                |
| CK5703WA              | Triode       | UHF Osc.            | 6.3             | 200       | Htr  | 5G          | 1.5                       | Dia. = .400 |                | See Reliable Cathode Type Subminiature Section for Characteristics |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK5703WA              |
| CK5704                | Diode        | Detector            | 6.3             | 150       | Htr  | 4D          | 1.5                       | Dia. = .315 |                | Max. RMS Plate Voltage = 150v; Max. Io = 9 mdc                     |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK5704                |
| CK5744                | Triode       | Amp.-HF Osc.        | 6.3             | 200       | Htr  | 5H          | 1.5                       | Dia. = .400 |                | 250                                                                | Rk500        |              |              | 4               |                  | 70         |                    | 4000                  |                                                 |                   | CK5744                |
| CK5744WA              | Triode       | Amp.-HF Osc.        | 6.3             | 200       | Htr  | 5H          | 1.5                       | Dia. = .400 |                | See Reliable Cathode Type Subminiature Section for Characteristics |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK5744WA              |
| CK5783                | Gas Diode    | Volt. Reference     |                 |           | Cold | 3A          | 1 3/8                     | Dia. = .400 |                | See Voltage Reference Tube Section for Characteristics             |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK5783                |
| CK5783WA              | Gas Diode    | Volt. Reference     |                 |           | Cold | 3A          | 1 3/8                     | Dia. = .400 |                | See Voltage Reference Tube Section for Characteristics             |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK5783WA              |
| CK5784                | Pentode      | Mixer-Gated Amp.    | 6.3             | 200       | Htr  | 7A          | 1.5                       | Dia. = .400 |                | 120                                                                | -2           | 120          | 0            | 5.2             | 3.5              |            |                    | 3200                  |                                                 |                   | CK5784                |
| CK5784WA              | Pentode      | Mixer-Gated Amp.    | 6.3             | 200       | Htr  | 7A          | 1.5                       | Dia. = .400 |                | See Reliable Cathode Type Subminiature Section for Characteristics |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK5784WA              |
| CK5785                | Diode        | HW Rectifier        | 1.25            | 15        | Fil  | 7F          | 1.5                       | .400        | .300           | See Rectifier Tube Section for Characteristics                     |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK5785                |
| CK5787                | Gas Diode    | Volt. Regulator     |                 |           | Cold | 3A          | 2 1/8                     | Dia. = .400 |                | See Voltage Regulator Tube Section for Characteristics             |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK5787                |
| CK5787WA              | Gas Diode    | Volt. Regulator     |                 |           | Cold | 3A          | 2 1/8                     | Dia. = .400 |                | See Voltage Regulator Tube Section for Characteristics             |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK5787WA              |
| CK5829                | Dble. Diode  | Detector            | 6.3             | 150       | Htr  | 7FA         | 1.5                       | .410        | .385           | Max. Inverse Peak Voltage = 330v; Max. Io = 5 ma. per plate        |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK5829                |
| CK5829WA              | Dble. Diode  | Detector            | 6.3             | 150       | Htr  | 7FA         | 1.5                       | .410        | .385           | See Reliable Cathode Type Subminiature Section for Characteristics |              |              |              |                 |                  |            |                    |                       |                                                 |                   | CK5829WA              |
| CK5851 <sup>7</sup>   | Beam Pent.   | R-F Pwr. Amp        | 1.25<br>2.5     | 110<br>55 | Fil  | 8CA         | 1.6                       | Dia. = .400 |                | 125                                                                | -7.5         | 125          |              | 5.5             | 0.9              |            | 0.175              | 1600                  |                                                 |                   | CK5851 <sup>7</sup>   |
| CK5854                | Pentode      | Power Amp.          | 1.25            | 30        | Fil  | 5J          | 1.5                       | .385        | .285           | 45                                                                 | -2.0         | 45           |              | 0.8             | 0.25             |            | 0.35               | 550                   | 9.5                                             | 0.05              | CK5854                |
| CK5873 <sup>7</sup>   | Dble. Triode | Voltage Amp.        | 6.3             | 300       | Htr  | 8K          | 1.5                       | Dia. = .400 |                | 150                                                                | -3.0         |              |              | 9.0             |                  | 22         |                    | 2900                  | (Each Unit)                                     |                   | CK 5873 <sup>7</sup>  |
| CK5875 <sup>1</sup>   | Pentode      | Radiosonde          | 1.25            | 100       | Fil  | 5A          | 1.5                       | .385        | .285           | 90                                                                 | 0            | 90           |              | 3.5             | 1.0              |            |                    | 2500                  |                                                 |                   | CK5875 <sup>1</sup>   |

See page 3 for reference notes — See pages 18 and 19 for basing diagrams and terminal connections.  
This data is compiled as a Raytheon service to the field, it is not intended to indicate type availability.