

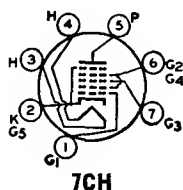
## 18FX6

Refer to chart at end of section.

## 18FX6A

## PENTAGRID CONVERTER

Miniature type used for converter applications in ac/dc radio receivers. Outlines section, 5C; requires miniature 7-contact socket. Heater: volts (ac/dc), 18; amperes, 0.1; warm-up time (average), 20 seconds; maximum heater-cathode volts,  $\pm 100$  peak.



7CH

## Converter

## MAXIMUM RATINGS (Design-Maximum Values)

|                                                  |     |       |
|--------------------------------------------------|-----|-------|
| Plate Voltage                                    | 150 | volts |
| Grids-No.2-and-No.4 (Screen-Grid) Supply Voltage | 150 | volts |
| Grids-No.2-and-No.4 Voltage                      | 110 | volts |
| Grids-No.2-and-No.4 Input                        | 1.2 | watts |
| Plate Dissipation                                | 1   | watt  |

## TYPICAL OPERATION (Separate Excitation)\*

|                                                                              |       |            |
|------------------------------------------------------------------------------|-------|------------|
| Plate Voltage                                                                | 100   | volts      |
| Grids-No.2-and-No.4 (Screen-Grid) Voltage                                    | 100   | volts      |
| Grid-No.3 (Control-Grid) Voltage                                             | -1.5  | volts      |
| Grid-No.1 (Oscillator-Grid) Resistor                                         | 20000 | ohms       |
| Plate Resistance (Approx.)                                                   | 0.4   | megohm     |
| Conversion Transconductance                                                  | 480   | $\mu$ mhos |
| Plate Current                                                                | 2.3   | mA         |
| Grids-No.2-and-No.4 Current                                                  | 6.2   | mA         |
| Grid-No.1 Current                                                            | 0.5   | mA         |
| Total Cathode Current                                                        | 9     | mA         |
| Grid-No.3 Voltage (Approx.) for conversion transconductance of 10 $\mu$ mhos | -21   | volts      |

NOTE: The transconductance between grid No.1 and grids No.2 and No.4 connected to plate (not oscillating) is approximately 7000  $\mu$ mhos under the following conditions: grids No.1 and No.3 at 0 volts; grids No.2 and No.4 and plate at 100 volts. Under the same conditions, the plate current is 24  $\mu$ A, and the amplification factor is 22.

\* The characteristics shown with separate excitation correspond very closely with those obtained in a self-excited oscillator circuit operating with zero bias.

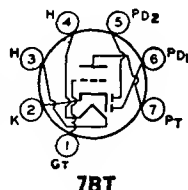
## 18FY6

Refer to chart at end of section.

## 18FY6A

TWIN DIODE—  
HIGH-MU TRIODE

Miniature type used as combined detector, amplifier, and avc tube in compact ac/dc radio receivers. Outlines section, 5C; requires miniature 7-contact socket. Heater: volts (ac/dc), 18; amperes, 0.1; warm-up time (average), 20 seconds; maximum heater-cathode volts,  $\pm 100$  peak.



7BT

Triode Unit as Class A<sub>1</sub> Amplifier

## MAXIMUM RATINGS (Design-Maximum Values)

|                                   |     |       |
|-----------------------------------|-----|-------|
| Plate Voltage                     | 150 | volts |
| Grid Voltage, Positive-bias value | 0   | volts |
| Plate Dissipation                 | 0.5 | watt  |

## CHARACTERISTICS

|                            |       |            |
|----------------------------|-------|------------|
| Plate Voltage              | 100   | volts      |
| Grid Voltage               | -1    | volt       |
| Amplification Factor       | 100   |            |
| Plate Resistance (Approx.) | 77000 | ohms       |
| Transconductance           | 1300  | $\mu$ mhos |
| Plate Current              | 0.6   | mA         |

## Diode Units (Each Unit)

## MAXIMUM RATINGS (Design-Maximum Values)

|               |   |    |
|---------------|---|----|
| Plate Current | 1 | mA |
|---------------|---|----|