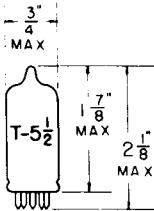


## TUNG-SOL

## PENTAGRID AMPLIFIER

MINIATURE TYPE



GLASS BULB

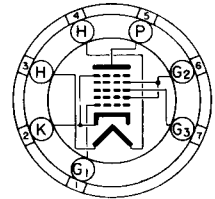
COATED UNIPOTENTIAL CATHODE

HEATER

18 VOLTS 0.10 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

MINIATURE BUTTON  
7 PIN BASE

7CH

THE 18FX6 IS A DUAL CONTROL PENTAGRID AMPLIFIER IN THE 7 PIN MINIATURE CONSTRUCTION. IT HAS A 100 MA HEATER AND IS DESIGNED FOR CONVERTER APPLICATIONS IN AC/DC TYPE RADIO RECEIVERS.

## DIRECT INTERELECTRODE CAPACITANCES

	WITH SHIELD <sup>A</sup>	WITHOUT SHIELD	
GRID #3 TO PLATE (MAX.)	0.25	0.30	$\mu\mu\text{f}$
GRID #3 TO GRID #1 (MAX.)	0.15	0.15	$\mu\mu\text{f}$
GRID #3 INPUT: G3 TO (H+K+G1+G2+4+G5+P)	7.0	7.0	$\mu\mu\text{f}$
GRID #1 INPUT: G1 TO (H+K+G2+4+G3+G5+P)	5.5	5.5	$\mu\mu\text{f}$
OUTPUT: P TO (H+K+G1+G2+4+G3+G5)	13.0	8.0	$\mu\mu\text{f}$
GRID #1 TO CATHODE	3.0	3.0	$\mu\mu\text{f}$
CATHODE TO ALL ELECTRODES EXCEPT GRID #1	20.0	15.0	$\mu\mu\text{f}$
GRID #1 TO PLATE	0.05	0.1	$\mu\mu\text{f}$

<sup>A</sup> SHIELD #316 CONNECTED TO CATHODE.

## RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM<sup>B</sup>

HEATER VOLTAGE	18	VOLTS
MAXIMUM PLATE VOLTAGE	150	VOLTS
MAXIMUM #2 & GRID #4 SUPPLY VOLTAGE	150	VOLTS
MAXIMUM GRID #2 & GRID #4 VOLTAGE	110	VOLTS
MAXIMUM PLATE DISSIPATION	1.0	WATT
MAXIMUM GRID #2 & GRID #4 DISSIPATION	1.2	WATT
MAXIMUM HEATER-CATHODE VOLTAGE	100	VOLTS

<sup>B</sup>

DESIGN-MAXIMUM RATINGS ARE LIMITING VALUES OF OPERATING AND ENVIRONMENTAL CONDITIONS APPLICABLE TO A BOGEY ELECTRON DEVICE OF A SPECIFIED TYPE AS DEFINED BY ITS PUBLISHED DATA, AND SHOULD NOT BE EXCEEDED UNDER THE WORST PROBABLE CONDITIONS. THE DEVICE MANUFACTURER CHOOSES THESE VALUES TO PROVIDE ACCEPTABLE SERVICEABILITY OF THE DEVICE, TAKING RESPONSIBILITY FOR THE EFFECTS OF CHANGES IN OPERATING CONDITIONS DUE TO VARIATIONS IN DEVICE CHARACTERISTICS. THE EQUIPMENT MANUFACTURER SHOULD DESIGN SO THAT INITIALLY AND THROUGHOUT LIFE NO DESIGN-MAXIMUM VALUE FOR THE INTENDED SERVICE IS EXCEEDED WITH A BOGEY DEVICE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, SIGNAL VARIATION, AND ENVIRONMENTAL CONDITIONS.

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

## SEPARATE EXCITATION

HEATER VOLTAGE	18	VOLTS
HEATER CURRENT	0.10	AMP.
PLATE VOLTAGE	100	VOLTS
GRID #2 VOLTAGE	100	VOLTS
GRID #3 VOLTAGE	-1.5	VOLTS
GRID #1 RESISTANCE	20 000	OHMS
GRID #1 CURRENT	0.5	MA.
PLATE CURRENT	2.3	MA.
GRID #2 CURRENT	6.2	MA.
CONVERSION TRANSCONDUCTANCE	480	$\mu$ MHOS
PLATE RESISTANCE (APPROX.)	0.4	MEGOHM
CATHODE CURRENT	9	MA.
GRID #3 VOLTAGE (APPROX.) FOR $G_c = 10 \mu$ MHOS	-21	VOLTS

## OSCILLATOR SECTION - NON OSCILLATING

GRID #3 VOLTAGE	0	VOLTS
GRID #1 VOLTAGE	0	VOLTS
GRID #2 CONNECTED TO PLATE	100	VOLTS
CATHODE CURRENT	24	MA.
TRANSCONDUCTANCE BETWEEN GRID #1, GRID #2 & GRID #4 CONNECTED TO PLATE	7000	$\mu$ MHOS
AMPLIFICATION FACTOR BETWEEN GRID #1, GRID #2 & #4 CONNECTED TO PLATE	22	
GRID #1 VOLTAGE (APPROX.) FOR $I_b = 20 \mu$ A	-9.2	VOLTS