

Plate Dissipation	6.5 Watts
Screen Dissipation	1.8 Watts
DC Cathode Current	65 Ma
Grid No. 1 Circuit Resistance	
Fixed Bias	0.25 Megohm
Cathode Bias	0.5 Megohm

CHARACTERISTICS AND TYPICAL OPERATION**Section 1****Gated Beam Discriminator Section—Limiter/Discriminator Service**

Input Signal Center Frequency	10.7	10.7	4.5 MHz
Frequency Deviation	± 75	± 75	± 25 KHz
Plate Supply Voltage	85	285	270 Volts
Plate Voltage	62	122	121 Volts
Accelerator Voltage	55	100	100 Volts
Cathode Bias Resistor-Variable ⁽¹⁾	200-400	200-400	200-400 Ohms
Plate Load Resistor	0.085	8.330	0.330 Megohm
Plate Linearity Resistor	470	1500	1000 Ohms
Integrating Capacitor	0.002	0.001	0.001 μf
Coupling Capacitor	0.25	0.01	0.25 μf
Minimum Signal Voltage for Limiting Action, RMS ⁽²⁾ ..	1.25	1.25	1.25 Volts
DC Plate Current	0.25	0.49	0.44 Ma
Accelerator Current	4.1	9.8	10 Ma
Input Signal Level for AM Rejection Adjustment ⁽¹⁾ ..	1.25	2.0	2.0 Volts
AM Rejection at Esig = 2.0 Volts, RMS	31	20	25 db
AM Rejection at Esig = 3.0 Volts, RMS	30	29	30 db
Total Harmonic Distortion	2.0	1.6	1.8 Percent
Peak Audio Output Voltage	6.0	16.6	16.8 Volts

Section No. 2 Power Amplifier

Plate Voltage	145 Volts
Screen Voltage	110 Volts
Grid No. 1 Voltage	-6.0 Volts
Peak AF Grid Voltage	6.0 Volts
Plate Resistance (Approx.)	30,000 Ohms
Transconductance	8600 μmhos
Zero Signal Plate Current	36 Ma
Maximum Signal Plate Current	40 Ma
Zero Signal Screen Current	3.0 Ma
Maximum Signal Screen Current	9.0 Ma
Load Resistance	3000 Ohms
Total Harmonic Distortion (Approx.)	10 Percent
Maximum Signal Power Output	2.4 Watts

NOTES:

- (1) The cathode resistor should be adjusted for maximum AM rejection in the output of the limiter-discriminator stage at the specified signal level. AM rejection is measured with an applied signal containing 30% AM and 30% FM.
- (2) At signal levels above specified value, limiting is within ± 3 decibels. Adequate shielding between components of the limiter grid and the quadrature grid must be used to insure proper phasing of the voltage developed at the quadrature grid. Standard de-emphasis requirements for FM are included. The Q of the quadrature grid circuit should be high enough to develop a minimum of 4 volts (RMS) signal with 2 volts (RMS) of the center-frequency signal applied to the limiter grid. It is recommended that the coil be shunted by a minimum of 10Pf. The capacitance may be composed of tube input capacitance, stray capacitance, and distributed capacitance, as well as physical.

RF/IF AMPLIFIER**18FW6A****Semi-Remote Cutoff Pentode**

Construction	Miniature T-5½
Base	Button 7 Pin, E7-1
Basing	7BK
Outline	5-2
Maximum Diameter	0.750 In.
Maximum Seated Height	1.875 In.
Maximum Overall Height	2.125 In.

**ELECTRICAL DATA
HEATER OPERATION**

Heater Voltage	18 Volts
Heater Current	100 Ma
Heater Warm-up Time	20 Seconds

