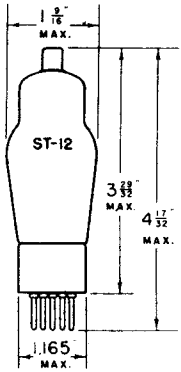


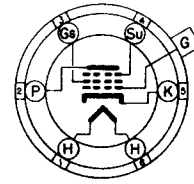
TRIPLE GRID

REMOTE CUT-OFF AMPLIFIER

UNIPOTENTIAL CATHODE

HEATER
6.3 VOLTS 0.3 AMPERE
AC OR DC

GLASS BULB



6F

BOTTOM VIEW

SMALL 6 PIN BASE

THE TUNG-SOL 78 IS A TRIPLE GRID REMOTE CUT-OFF AMPLIFIER. IT IS SUITABLE FOR USE WITH AVC IN RF AND IF AMPLIFIERS AND MINIMIZES CROSS MODULATION. WITH THE EXCEPTION OF CAPACITANCES, ITS RATINGS AND ELECTRICAL CHARACTERISTICS ARE IDENTICAL WITH THOSE OF THE 6K7, THE 6K7G AND THE 6K7GT.

RATINGS

MAXIMUM PLATE VOLTAGE	300	VOLTS
MAXIMUM SCREEN SUPPLY VOLTAGE	300	VOLTS
MAXIMUM SCREEN VOLTAGE	125	VOLTS
MINIMUM EXTERNAL GRID BIAS VOLTAGE	0	VOLTS
MAXIMUM PLATE DISSIPATION	2.75	WATTS
MAXIMUM SCREEN DISSIPATION	0.35	WATT

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A1 AMPLIFIER

PLATE VOLTAGE	90	180	250	250	VOLTS
SCREEN VOLTAGE	90	75	100	125	VOLTS
CONTROL GRID VOLTAGE	-3	-3	-3	-3	VOLTS
SUPPRESSOR GRID	CONNECTED TO CATHODE AT SOCKET				
PLATE CURRENT	5.4	4.0	7.0	10.5	MA.
SCREEN CURRENT	1.3	1.0	1.7	2.6	MA.
PLATE RESISTANCE APPROX.	0.3	1.0	0.8	0.6	MEGOHM
TRANSCONDUCTANCE	1275	1100	1450	1650	µMHOS
CONTROL GRID BIAS FOR TRANSCONDUCTANCE = 2 µMHOS	-38.5	-38.5	-42.5	-52.5	VOLTS

CONTINUED NEXT PAGE

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PLATE 515-2

AUG. 14 1939

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TYPICAL OPERATING CONDITIONS WITH VARIABLE BIAS

MIXER IN SUPERHETERODYNE CIRCUITS

PLATE VOLTAGE	250	VOLTS
SCREEN VOLTAGE	100	VOLTS
CONTROL GRID VOLTAGE APPROX. [A]	-10	VOLTS
SUPPRESSOR GRID	CONNECTED TO CATHODE AT SOCKET	

[A] THE GRID BIAS SHOWN IS MINIMUM FOR AN OSCILLATOR PEAK VOLTAGE OF 7 VOLTS. THESE VALUES ARE OPTIMUM.

DIRECT INTERELECTRODE CAPACITANCES[S]

CONTROL GRID TO CATHODE	4.5	μμf
PLATE TO CATHODE	11	μμf
CONTROL GRID TO PLATE	.007 MAX.	μμf

[S] MEASURED WITH AN EXTERNAL SHIELD. THE INTERNAL SHIELD IN THE DOME IS CONNECTED TO THE CATHODE WITHIN THE TUBE.

PLATE 516-2

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