TUNG-SOL

TRIODE

MINIATURE TYPES

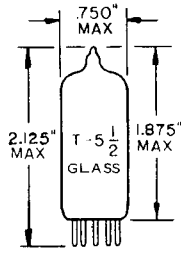
FOR

UHF TELEVISION SERVICE

COATED UNIPOTENTIAL CATHODE

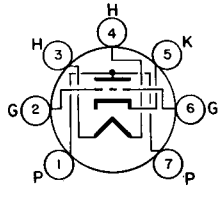
ANY MOUNTING POSITION

3AF4
OUTLINE
JEDEC 5-2



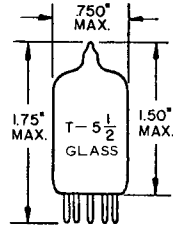
BASE 7 PIN BUTTON
JEDEC E7-1

BASING DIAGRAM
JEDEC 7DK



BOTTOM VIEW

3AF4A
OUTLINE
JEDEC 5-1



BASE 7 PIN BUTTON
JEDEC E7-1

THE 3AF4 AND 3AF4A ARE MEDIUM MU TRIODES IN THE 7 PIN MINIATURE CONSTRUCTION. THEY ARE DESIGNED FOR LOCAL OSCILLATOR SERVICE IN TELEVISION RECEIVERS WHICH OPERATE IN THE UHF REGION. INTERNAL LEAD INDUCTANCE IS REDUCED BY EMPLOYING DOUBLE CONNECTIONS TO THE PLATE AND GRID. ELECTRICALLY THE 3AF4 IS IDENTICAL TO THE 3AF4A AND DIFFERS IN ENVELOPE SIZE.

DIRECT INTERELECTRODE CAPACITANCES

WITH EXTERNAL SHIELD #316 CONNECTED TO CATHODE EXCEPT AS NOTED

GRID TO PLATE	1.9	pf
GRID TO CATHODE AND HEATER	2.2	pf
PLATE TO CATHODE AND HEATER	1.4	pf
HEATER TO CATHODE - SEE NOTE BELOW	2.2	pf

NOTE: WITH EXTERNAL SHIELD #316 CONNECTED TO PLATE

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	3.15 VOLTS	450	mA
HEATER WARM-UP TIME		11	SECONDS
LIMITS OF SUPPLIED CURRENT		450 ± 30	mA
PEAK HEATER-CATHODE VOLTAGE:			
HEATER NEGATIVE WITH RESPECT TO CATHODE		50	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE		50	VOLTS
DC COMPONENT		25	VOLTS

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MAXIMUM RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

UHF OSCILLATOR

PLATE VOLTAGE	150	VOLTS
NEGATIVE GRID VOLTAGE	50	VOLTS
PLATE DISSIPATION	2.5	WATTS
GRID CURRENT	2	mA
CATHODE CURRENT	24	mA

CHARACTERISTICS

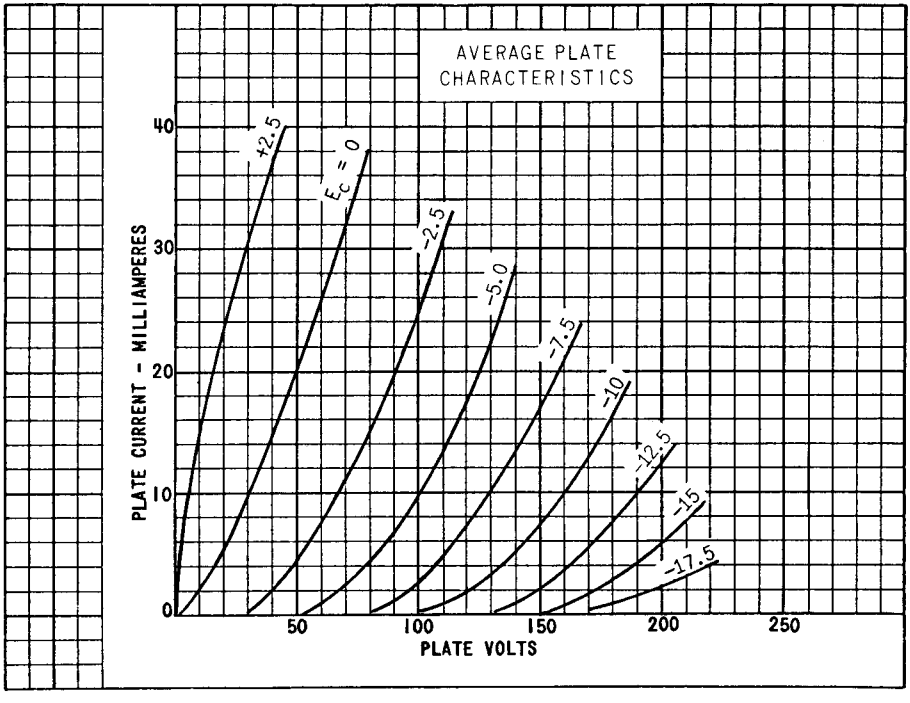
CLASS A_1 AMPLIFIER

PLATE VOLTAGE	80	VOLTS
CATHODE RESISTOR	150	OHMS
PLATE CURRENT	17.5	mA
TRANSCONDUCTANCE	6,500	μMHOS
AMPLIFICATION FACTOR	13.5	
PLATE RESISTANCE	APPROX. 2,100	OHMS

TYPICAL OPERATION

AT FREQUENCY OF 1.000 MC/S

PLATE VOLTAGE	100	VOLTS
PLATE RESISTOR	220	OHMS
GRID RESISTOR	10,000	OHMS
PLATE CURRENT	17	mA
GRID CURRENT	APPROX. 750	μA



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