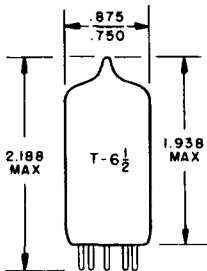


TUNG-SOL

TRIODE - PENTODE

MINIATURE TYPE

OUTLINE DRAWING
JEDEC 6-2

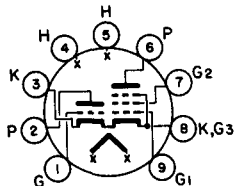


BASE 9 PIN BUTTON
JEDEC E9-1

FOR
USE IN VHF
TV RECEIVERS

COATED UNIPOTENTIAL CATHODE
ANY MOUNTING POSITION

BASING DIAGRAM
JEDEC 9GF



BOTTOM VIEW

THE 6FG7 IS A MEDIUM-MU TRIODE AND SHARP-CUTOFF PENTODE IN THE 9-PIN MINIATURE CONSTRUCTION. IT IS DESIGNED FOR USE AS A COMBINED TRIODE OSCILLATOR AND PENTODE MIXER IN VHF TELEVISION RECEIVERS. EXCEPT FOR HEATER CHARACTERISTICS AND RATINGS, THE 6FG7 IS IDENTICAL TO THE 5FG7.

DIRECT INTERELECTRODE CAPACITANCES

TRIODE UNIT:

GRID TO PLATE
GRID TO CATHODE AND PENTODE GRID 3 & HEATER 3
PLATE TO CATHODE & PENTODE GRID 3 & HEATER

PENTODE UNIT:

GRID 1 TO PLATE - MAX.
GRID 1 TO CATHODE & GRID 2, GRID 2, AND HEATER
PLATE TO CATHODE & GRID, GRID 2, AND HEATER
HEATER TO CATHODE & PENTODE GRID 3

WITHOUT SHIELD	SHIELD #315 CONNECTED TO CATHODE	
1.8	1.8	pf
3	3	pf
1.3	1.9	pf
0.02	0.01	pf
5	5	pf
2.4	3.4	pf
6	6 A	pf

A - SHIELD #315 CONNECTED TO GROUND

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	6.3 VOLTS	450	mA
HEATER WARM-UP TIME		11	SECONDS
LIMITS OF SUPPLIED CURRENT		450 $\pm$ 30	mA
LIMITS OF APPLIED VOLTAGE		6.3 $\pm$ 0.6	VOLTS
PEAK HEATER - CATHODE VOLTAGE - EACH UNIT:			
HEATER NEGATIVE WITH RESPECT TO CATHODE		200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE		200	VOLTS
DC COMPONENT		100	VOLTS

MAXIMUM RATINGS

DESIGN MAXIMUM RATINGS - SEE EIA STANDARD RS-239

	TRIODE UNIT	PENTODE UNIT	
PLATE VOLTAGE	330	330	VOLTS
GRID 2 SUPPLY VOLTAGE		330	VOLTS
GRID 2 VOLTAGE	SEE RATING CHART		
GRID 1 VOLTAGE:			
POSITIVE - BIAS VALUE	0	0	VOLTS
GRID 2 INPUT:			
FOR GRID 2 VOLTAGES UP TO 165 VOLTS		0.55	WATT
FOR GRID 2 VOLTAGES BETWEEN 165 AND 330 VOLTS	SEE RATING CHART		
PLATE DISSIPATION	2.5	3	WATTS

CHARACTERISTICS

CLASS A₁ AMPLIFIER

	TRIODE UNIT	PENTODE UNIT	
PLATE VOLTAGE	125	100 125	VOLTS
GRID 2 VOLTAGE	-	100 125	VOLTS
GRID 1 VOLTAGE	-1	0 -1	VOLTS
PLATE CURRENT	13	11	mA
GRID 2 CURRENT	-	- 4	mA
TRANSCONDUCTANCE	7,500	7,400 6,000	μ MHOS
AMPLIFICATION FACTOR	43		
PLATE RESISTANCE - APPROX.	5.7	- 180	KOHMS
GRID 1 VOLTAGE FOR $I_b = 30 \mu A$ - APPROX.	-6.5	- -7.5	VOLTS

GRID 2 DISSIPATION - WATTS

0.50

0.25

0

0

100

200

300

400

500

GRID 2 VOLTS

GRID 2 INPUT
RATING CHART