

TUNG-SOL

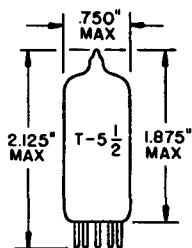
PENTODE

MINIATURE TYPE

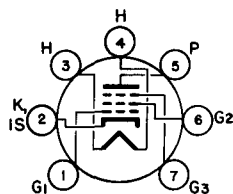
SHARP-CUTOFF PENTODE
WITH
DUAL CONTROL GRIDS

COATED UNIPOTENTIAL CATHODE

ANY MOUNTING POSITION



GLASS BULB
SMALL-BUTTON MINIATURE
7 PIN BASE E7-1
OUTLINE DRAWING
JEDEC 5-2



BOTTOM VIEW
BASING DIAGRAM
JEDEC 7EN

THE 6GY6 IS A SHARP-CUTOFF PENTODE IN THE 7 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED PRIMARILY FOR USE IN GATED AGC AMPLIFIER AND NOISE-INVERTER SERVICE. PLATE CURRENT IS CONTROLLED BY THE ACTIONS OF GRID 1 AND GRID 3.

DIRECT INTERELECTRODE CAPACITANCES

WITHOUT EXTERNAL SHIELD

GRID 1 TO PLATE	0.026	pf
GRID 1 TO CATHODE & I.S., GRID 3, GRID 2 & HEATER	8	pf
GRID 1 TO GRID 3	0.12	pf
GRID 3 TO PLATE	1.6	pf
GRID 3 TO CATHODE & I.S., PLATE, GRID 2, GRID 1 & HEATER	6.5	pf

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 APPLIED VOLTAGE	6.3±0.6			VOLTS
LIMITS OF SUPPLIED CURRENT	450 ± 30			MA.
MAXIMUM PEAK HEATER-CATHODE VOLTAGE:				
HEATER NEGATIVE WITH RESPECT TO CATHODE	200			VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	200			VOLTS
DC COMPONENT	100			VOLTS

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MAXIMUM RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

GATED AGC AMPLIFIER AND NOISE-INVERTER SERVICE

PLATE VOLTAGE, DC	300	VOLTS
PEAK POSITIVE-PULSE PLATE VOLTAGE ^A	600	VOLTS
GRID 3 (CONTROL-GRID) VOLTAGE:		
POSITIVE VALUE	0	VOLTS
NEGATIVE VALUE	100	VOLTS
GRID 2 (SCREEN-GRID) SUPPLY VOLTAGE	300	VOLTS
GRID 1 (CONTROL-GRID) VOLTAGE:		
POSITIVE VALUE	0	VOLTS
NEGATIVE VALUE	50	VOLTS
PLATE DISSIPATION	1.7	WATTS
GRID 2 INPUT:		
FOR GRID 2 VOLTAGES UP TO 150 VOLTS	1.0	WATTS
FOR GRID 2 VOLTAGES BETWEEN 150 VOLTS AND 300 VOLTS		

See Rating Chart

MAXIMUM CIRCUIT VALUES

GRID 3 CIRCUIT RESISTANCE	0.68	MEGOHM
GRID 1 CIRCUIT RESISTANCE:		
FOR FIXED-BIAS OPERATION	0.22	MEGOHM
FOR CATHODE-BIAS OPERATION	0.47	MEGOHM

CHARACTERISTICS

PLATE SUPPLY VOLTAGE	150	VOLTS
GRID 3 SUPPLY VOLTAGE	0	VOLTS
GRID 2 SUPPLY VOLTAGE	100	VOLTS
GRID 1 SUPPLY VOLTAGE	0	VOLTS
CATHODE BIAS RESISTOR	180	OHMS
PLATE CURRENT	3.7	MA.
GRID 2 CURRENT	3	MA.
TRANSCONDUCTANCE, GRID 1 TO PLATE	3700	μ MHOS
TRANSCONDUCTANCE, GRID 3 TO PLATE	750	μ MHOS
PLATE RESISTANCE	(APPROX.) 0.14	MEGOHM
GRID 1 SUPPLY VOLTAGE FOR $I_b = 20 \mu A$	(APPROX.) -4.5	VOLTS
GRID 3 SUPPLY VOLTAGE FOR $I_b = 20 \mu A$	(APPROX.) -7	VOLTS

^A

THE DURATION OF THE VOLTAGE PULSE MUST NOT EXCEED 15% OF ONE HORIZONTAL SCANNING CYCLE. IN
A 525-LINE, 30-FRAME SYSTEM, 15% OF ONE HORIZONTAL SCANNING CYCLE IS 10 MICROSECONDS.

