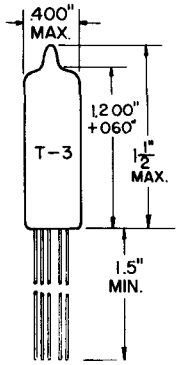
TUNG-SOL

TRIODE

SUBMINIATURE



GLASS BULB

BASE - SAME AS E8-10 EXCEPT LEADS 1, 2, & 6 REMOVED

OUTLINE DRAWING

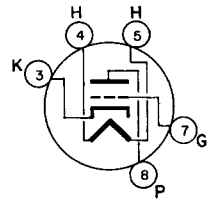
JEDEC 3-2

COATED UNIPOTENTIAL CATHODE

FOR RADIOSONDE SERVICE

OSCILLATOR AT 400 MC

ANY MOUNTING POSITION



BOTTOM VIEW

THE 6026 IS A HIGH-EFFICIENCY OSCILLATOR TRIODE IN A ROUND SUBMINIATURE CONSTRUCTION WITH 5 FLEXIBLE LEADS. IT IS INTENDED PARTICULARLY FOR TRANSMITTING SERVICE IN RADIOSONDE AND SIMILAR APPLICATIONS. AS A CLASS C OSCILLATOR IN SUCH SERVICE, THE TUBE CAN DELIVER A USEFUL POWER OUTPUT OF 1.25 WATTS.

DIRECT INTERELECTRODE CAPACITANCES

WITHOUT EXTERNAL SHIELD

GRID TO PLATE	1.3	pf
INPUT	2.0	pf
OUTPUT	0.42	pf

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	6.3 VOLTS	200	MA.
HEATER SUPPLY LIMITS:			
VOLTAGE OPERATION		5.2 TO 6.6	VOLTS
MAXIMUM PEAK HEATER-CATHODE VOLTAGE		0	VOLTS

MAXIMUM RATINGS

ABSOLUTE MAXIMUM VALUES - SEE EIA STANDARD RS-239

OSCILLATOR - CLASS C TELEGRAPHY

DC PLATE VOLTAGE	150	VOLTS
DC GRID VOLTAGE	-50	VOLTS
TOTAL CATHODE CURRENT	40	MA.
DC GRID CURRENT	10	MA.
PLATE INPUT	3.3	WATTS
PLATE DISSIPATION	3.0	WATTS

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TYPICAL OPERATING CHARACTERISTICS

AS OSCILLATOR AT 400 MC

DC PLATE VOLTAGE	135	VOLTS
GRID RESISTOR	1300	OHMS
DC PLATE CURRENT	20	MA.
DC GRID CURRENT (APPROX.)	9.5	MA.
USEFUL POWER OUTPUT	1.25	WATTS

CLASS A_1 AMPLIFIER

PLATE VOLTAGE	120	VOLTS
CATHODE RESISTOR	220	OHMS
AMPLIFICATION FACTOR	24	
PLATE RESISTANCE	4000	OHMS
TRANSCONDUCTANCE	5900	μMHOS
PLATE CURRENT	12	MA.

CHARACTERISTICS RANGE VALUES FOR EQUIPMENT DESIGN

	NOTE	MIN.	MAX.	
HEATER CURRENT:				
WITH 5.2 VOLTS AC ON HEATER	---	0.176	---	AMP.
WITH 6.6 VOLTS AC ON HEATER	---	---	0.225	AMP.
AMPLIFICATION FACTOR	1	17	31	
GRID-TO-PLATE CAPACITANCE	---	1.05	1.55	pf
GRID-TO-CATHODE CAPACITANCE	---	1.55	2.45	pf
PLATE-TO-CATHODE CAPACITANCE	---	0.345	0.495	pf
PLATE CURRENT	2	8	16	MA.
PLATE CURRENT	3	9.5	18.5	MA.
PLATE CURRENT	4	---	300	μAMP.
TRANSCONDUCTANCE	2	4200	7600	μMHOS
TRANSCONDUCTANCE	3	4600	8000	μMHOS

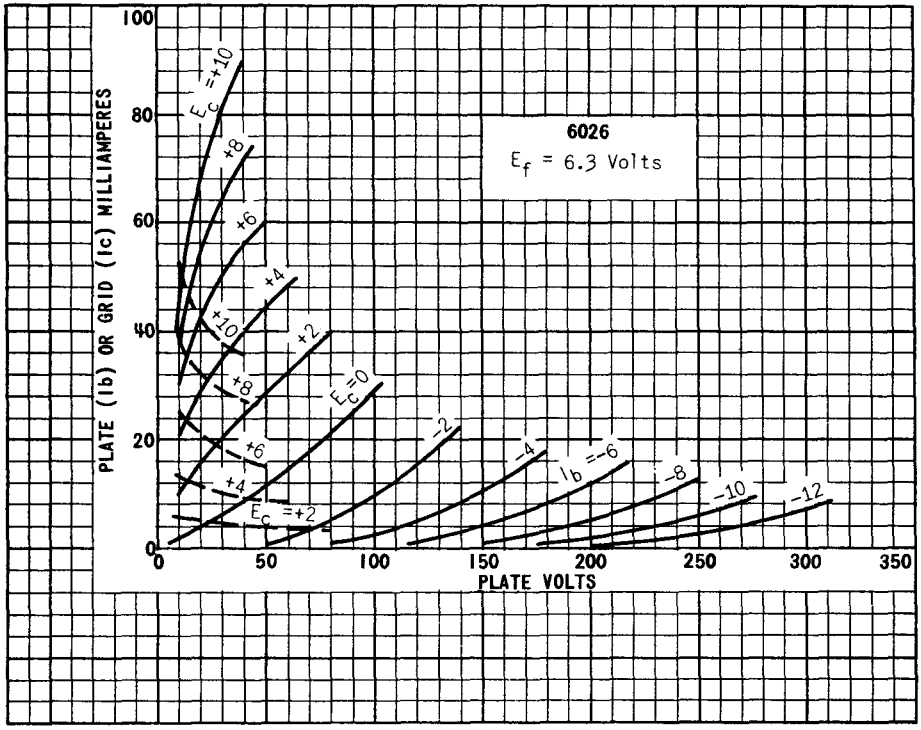
1. WITH 5.2 OR 6.3 VOLTS AC ON HEATER, 120 VOLTS DC ON PLATE, AND CATHODE RESISTOR OF 220 OHMS.

2. WITH 5.2 VOLTS AC ON HEATER, 120 VOLTS DC ON PLATE, AND CATHODE RESISTOR OF 220 OHMS.

3. WITH 6.3 VOLTS AC ON HEATER, 120 VOLTS DC ON PLATE, AND CATHODE RESISTOR OF 220 OHMS.

4. WITH 5.2 VOLTS AC ON HEATER, 120 VOLTS DC ON PLATE, -12 VOLTS DC ON GRID, AND CATHODE RESISTOR OF 220 OHMS.

[A] HEATER VOLTAGE RANGE AND MAXIMUM RATINGS ARE ESTABLISHED ON BASIS THAT TUBE HEATER WILL BE SUPPLIED FROM BATTERIES IN RADIOSONDE AND SIMILAR APPLICATIONS UTILIZING EQUIPMENT DESIGNED FOR EXTREME COMPACTNESS AND LIGHT WEIGHT AND REQUIRING TUBE LIFE OF ONLY A FEW HOURS.



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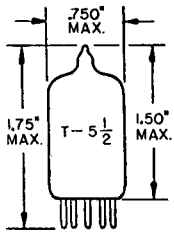
TUNG-SOL

OUTLINE DRAWING
JEDEC 5-1



GLASS BULB
MINIATURE BUTTON
7 PIN E7-1

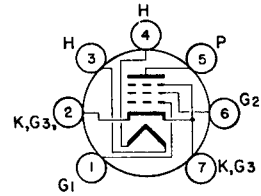
PENTODE

MINIATURE TYPE
FOR
COMMERCIAL AND INDUSTRIAL
RF APPLICATIONS

COATED UNIPOTENTIAL CATHODE

ANY MOUNTING POSITION

BASING DIAGRAM
JEDEC 7BD



BOTTOM VIEW

THE 6028 IS A SHARP-CUTOFF PENTODE IN THE 7 PIN MINIATURE CONSTRUCTION. IT IS INTENDED FOR RF APPLICATIONS WHERE A HIGH DEGREE OF RELIABILITY IS REQUIRED. THE TUBE IS CHARACTERIZED BY LONG LIFE AND STABLE PERFORMANCE.

DIRECT INTERELECTRODE CAPACITANCES

WITH SHIELD #316 CONNECTED TO CATHODE

GRID 1 TO PLATE	MAX.	0.02	pf
INPUT		3.9	pf
OUTPUT		2.85	pf

HEATER CHARACTERISTICS AND RATINGS

ABSOLUTE MAXIMUM VALUES – SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	20.0	VOLTS	50	mA
LIMITS OF APPLIED VOLTAGE			20.0±1.0	VOLTS
HEATER-CATHODE VOLTAGE:				
HEATER NEGATIVE WITH RESPECT TO CATHODE			75	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE			75	VOLTS

MAXIMUM RATINGS

ABSOLUTE MAXIMUM RATINGS – SEE EIA STANDARD RS-239

PLATE VOLTAGE	200	VOLTS
GRID 2 SUPPLY VOLTAGE	155	VOLTS
GRID 2 VOLTAGE	SEE RATING CHART	
CATHODE CURRENT	20	mA
PLATE DISSIPATION	1.85	WATTS
GRID 2 DISSIPATION FOR GRID 2 VOLTAGES UP TO 77.5 VOLTS	0.55	WATT

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CHARACTERISTICS

CLASS A1 AMPLIFIER
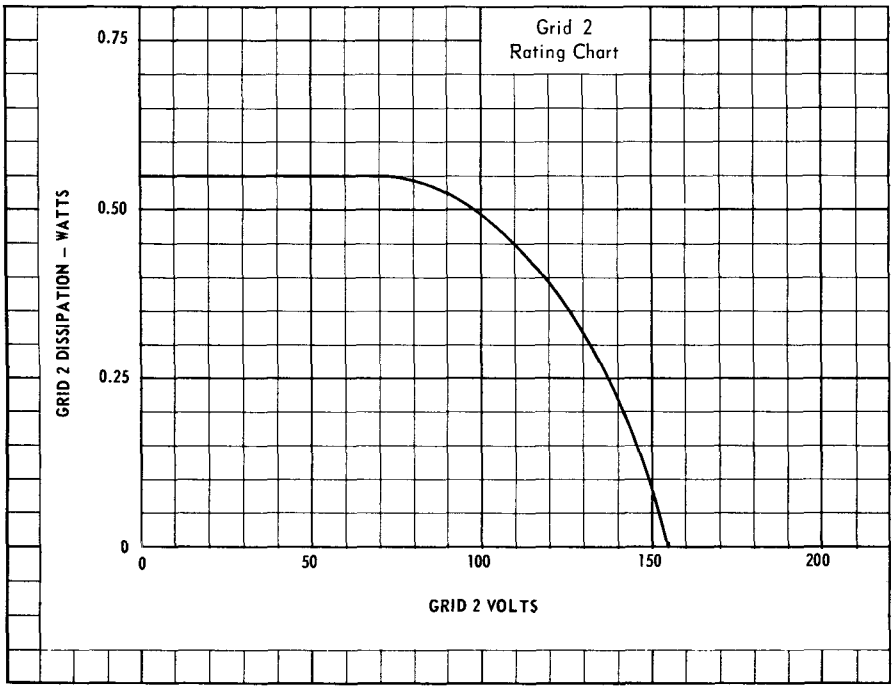
PLATE SUPPLY VOLTAGE	120	VOLTS
GRID 2 SUPPLY VOLTAGE	120	VOLTS
CATHODE RESISTOR (FIXED BIAS NOT RECOMMENDED)	200	OHMS
GRID 1 VOLTAGE	0	VOLTS
PLATE CURRENT	7	mA
GRID 2 CURRENT	2.25	mA
TRANSCONDUCTANCE	4,950	μMHOS
PLATE RESISTANCE (APPROX.)	0.34	MEGOHM
GRID 1 VOLTAGE FOR I_b = 200 μA MAX.	-10	VOLTS