TUNG-SOL

UHF POWER TRIODE

PENCIL TYPE

FOR

RF POWER AMPLIFIER, OSCILLATOR

AND FREQUENCY MULTIPLIER APPLICATIONS

IN MOBILE AND AIRCRAFT EQUIPMENT

PHYSICAL DIMENSIONS SEE OUTLINE DRAWING

ELECTRODE TERMINATIONS SEE OUTLINE DRAWING

COATED UNIPOTENTIAL CATHODE

ANY MOUNTING POSITION

THE 6264A IS A COAXIAL METAL-GLASS PENCIL-TYPE MEDIUM MU TRIODE WITH AN EXTERNAL PLATE RADIATOR. ITS MAXIMUM PLATE DISSIPATION IS 13 WATTS ICAS. THE TUBE MAY BE OPERATED WITH FULL RATINGS UP TO A FREQUENCY OF 500 MC/S, AND WITH REDUCED RATINGS UP TO 1700 MC/S.

ELECTRICAL DATA

DIRECT INTERELECTRODE CAPACITANCES

WITHOUT EXTERNAL SHIELD

GRID TO PLATE		1.75	pf
GRID TO CATHODE		2.95	pf
PLATE TO CATHODE	MAX.	0.07	pf

HEATER CHARACTERISTICS AND RATINGS

ABSOLUTE MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	6.0	VOLTS	280	MA.
LIMITS OF APPLIED VOLTAGE				
UNDER TRANSMITTING CONDITIONS			6.0 ± 0.6	VOLTS
UNDER STANDBY CONDITIONS - MAXIMUM			6.3	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE:				
HEATER NEGATIVE WITH RESPECT TO CATHODE			50	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE			50	VOLTS

AVERAGE STATIC CHARACTERISTICS

PLATE VOLTAGE	200	VOLTS
PLATE CURRENT	18.5	MA.
TRANSCONDUCTANCE	6,800	μMHOS
AMPLIFICATION FACTOR	40	

CLASS C TELEGRAPHY - RF POWER AMPLIFIER AND OSCILLATOR

MAXIMUM RATINGS - ABSOLUTE MAXIMUM SYSTEM

	CCS	ICAS	
DC PLATE VOLTAGE	330	400	VOLTS
DC GRID VOLTAGE	-100	-100	VOLTS
DC PLATE CURRENT	40	55	MA.
DC GRID CURRENT	25	25	MA.
DC CATHODE CURRENT	55	70	MA.

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CLASS C TELEGRAPHY - RF POWER AMPLIFIER AND OSCILLATOR - cont'd.

MAXIMUM RATINGS - ABSOLUTE MAXIMUM SYSTEM

	CCS	ICAS	
PLATE INPUT	13.2	22	WATTS
PLATE DISSIPATION	8	13	WATTS
PLATE SEAL TEMPERATURE	175	175	°C
FREQUENCY FOR OPERATION AT FULL RATINGS	500	500	MC/S
ALTITUDE FOR OPERATION AT FULL RATINGS	60,000	60,000	FEET
GRID CIRCUIT RESISTANCE	0.1	0.1	MEGOHMS

TYPICAL OPERATION AS RF AMPLIFIER WITH CATHODE DRIVE AT 500 MC/S

DC PLATE-TO-GRID VOLTAGE	342	395	VOLTS
DC CATHODE-TO-GRID VOLTAGE	42	45	VOLTS
FROM GRID RESISTOR OR COMBINATION OF GRID RESISTOR WITH FIXED SUPPLY OR CATHODE RESISTOR			
DC PLATE CURRENT	35	40	MA.
DC GRID CURRENT	13	15	MA.
DRIVING POWER	2.2	3	WATTS
USEFUL POWER OUTPUT WITH APPROX. 75% OUTPUT CIRCUIT EFFICIENCY	7	10	WATTS

FREQUENCY MULTIPLIER

MAXIMUM RATINGS - ABSOLUTE MAXIMUM SYSTEM

	CCS	ICAS	
DC PLATE VOLTAGE	300	350	VOLTS
DC GRID VOLTAGE	-125	-140	VOLTS
DC PLATE CURRENT	33	45	MA.
DC GRID CURRENT	25	25	MA.
DC CATHODE CURRENT	45	55	MA.
PLATE INPUT	9.9	15.9	WATTS
PLATE DISSIPATION	6	9.5	WATTS
PLATE SEAL TEMPERATURE	175	175	°C
FREQUENCY FOR OPERATION AT FULL RATINGS	500	500	MC/S
ALTITUDE FOR OPERATION AT FULL RATINGS	60,000	60,000	FEET
GRID CIRCUIT RESISTANCE	0.1	0.1	MEGOHMS

TYPICAL OPERATION - TRIPLER TO 510 MC/S
CATHODE DRIVE CIRCUIT

DC PLATE-TO-GRID VOLTAGE	410	472	VOLTS
DC CATHODE TO GRID VOLTAGE	110	122	VOLTS
FROM GRID RESISTOR OR COMBINATION OF GRID RESISTOR WITH FIXED SUPPLY OR CATHODE RESISTOR			
DC PLATE CURRENT	26	36.5	MA.
DC GRID CURRENT	4.1	5.8	MA.
DRIVING POWER	2.75	4.5	WATTS
USEFUL POWER OUTPUT WITH APPROX. 75% OUTPUT CIRCUIT EFFICIENCY	2.1	3.4	WATTS

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TUNG-SOL

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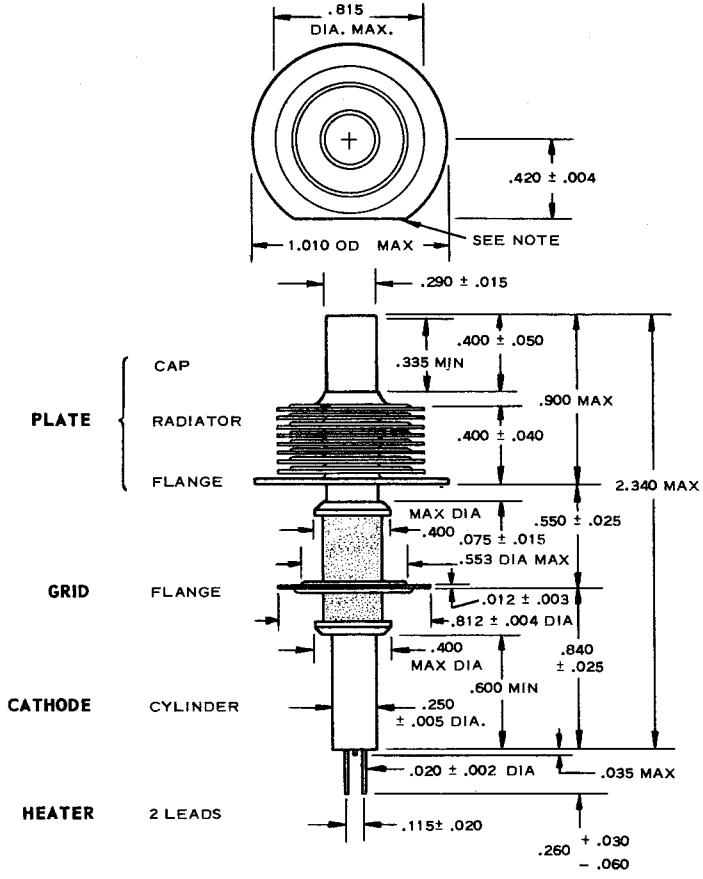
SPECIAL TESTS AND PERFORMANCE DATA

CONTROLLED ON A SAMPLING BASIS

LOW-PRESSURE VOLTAGE BREAKDOWN TEST
HIGH-FREQUENCY VIBRATION TEST
SEAL FRACTURE
HEATER CYCLING
1 - HOUR STABILITY LIFE PERFORMANCE
50 - HOUR SURVIVAL LIFE PERFORMANCE
500 - HOUR INTERMITTENT LIFE PERFORMANCE

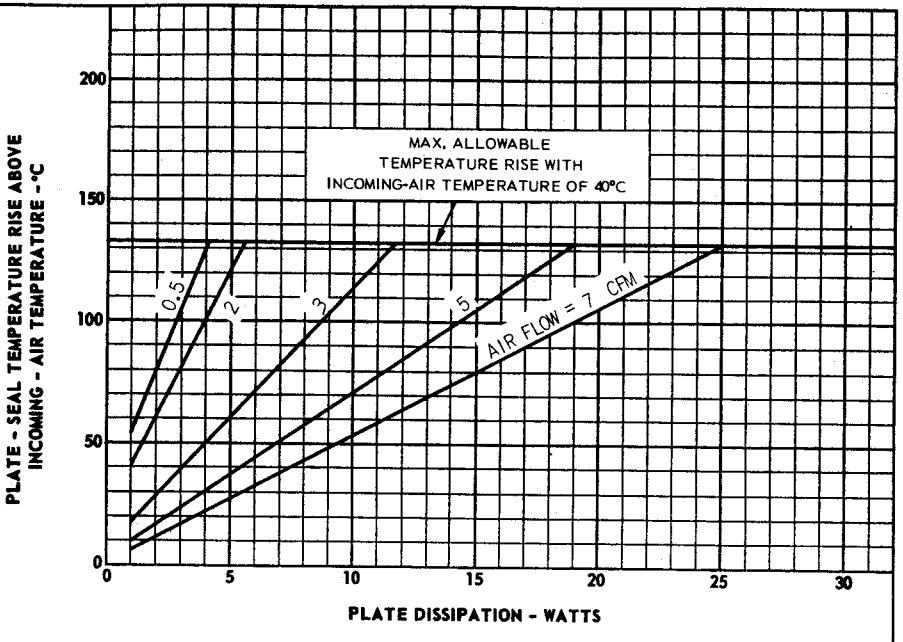
OUTLINE DRAWING



NOTE:

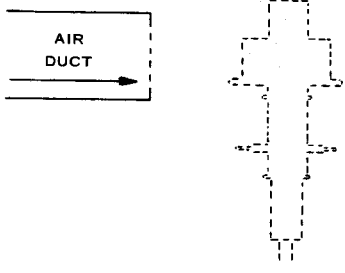
THE STRAIGHT EDGE ON THE PERIMETER OF THE LARGE FIN (PLATE TERMINAL) IS PARALLEL TO A PLANE THROUGH THE CENTERS OF THE HEATER PINS AT THEIR SEALS WITHIN 15°.

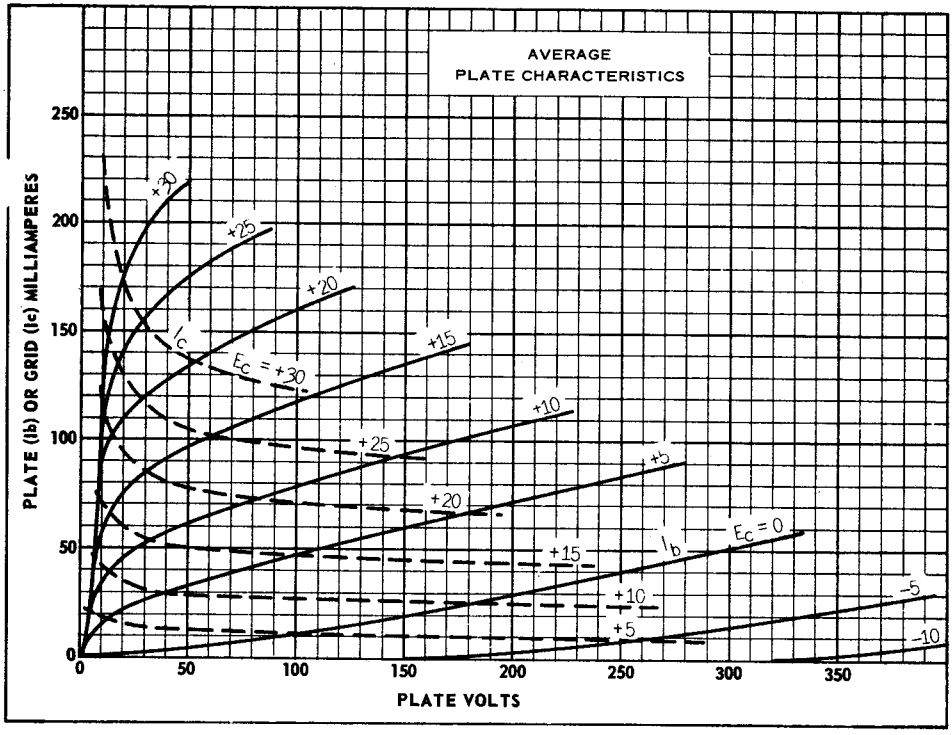
ALL DIMENSIONS IN INCHES

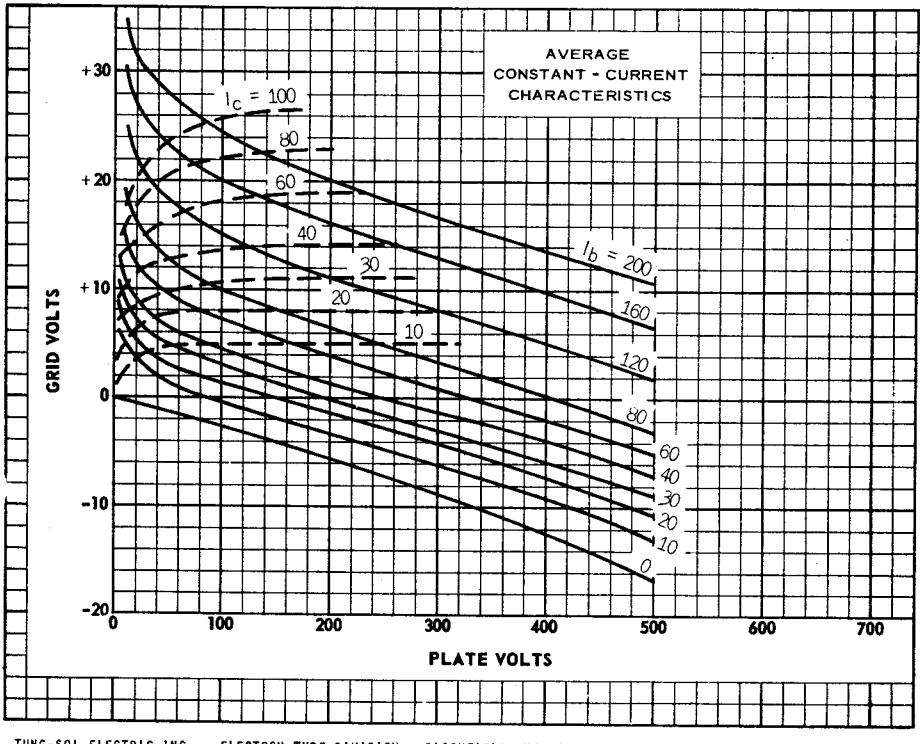


COOLING REQUIREMENTS

MAXIMUM PLATE - SEAL TEMPERATURE = 175° C
AIR - DUCT OPENING = 1 5/32" X 1 5/32"
WITH AIR-DUCT LOCATED AS SHOWN ON SKETCH







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