

**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 5675 IS A COAXIAL METAL-GLASS PENCIL-TYPE MEDIUM MU TRIODE. ITS MAXIMUM PLATE DISSIPATION IS 5 WATTS CCS. THE TUBE MAY BE OPERATED WITH FULL RATINGS UP TO A FREQUENCY OF 1,700 MC/S, AND WITH REDUCED RATINGS UP TO 3,000 MC/S.

## ELECTRICAL DATA

## DIRECT INTERELECTRODE CAPACITANCES

WITHOUT EXTERNAL SHIELD

GRID TO PLATE	1.4	pf
GRID TO CATHODE	2.4	pf
PLATE TO CATHODE	MAX. 0.09	pf

## HEATER CHARACTERISTICS AND RATINGS

ABSOLUTE MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	6.3 VOLTS	135	mA
LIMITS OF APPLIED VOLTAGE - AC OR DC		6.3 ± 0.6	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE:			
HEATER NEGATIVE WITH RESPECT TO CATHODE		90	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE		90	VOLTS
MINIMUM PREHEAT TIME		60	SEC.

## AVERAGE STATIC CHARACTERISTICS

PLATE VOLTAGE	135	VOLTS
CATHODE RESISTOR	68	OHMS
PLATE CURRENT	24	mA
TRANSCONDUCTANCE	6,200	μMHOS
AMPLIFICATION FACTOR	20	

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**TUNG-SOL**

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**CLASS C TELEGRAPHY - RF POWER AMPLIFIER AND OSCILLATOR**

MAXIMUM RATINGS - ABSOLUTE MAXIMUM SYSTEM - SEE EIA STANDARD RS-239

## CONTINUOUS COMMERCIAL SERVICE

DC PLATE VOLTAGE	300	VOLTS
DC GRID VOLTAGE	-90	VOLTS
DC PLATE CURRENT	31	mA
DC GRID CURRENT	8	mA
PLATE INPUT	5	WATTS
PLATE DISSIPATION - SEE NOTE	5	WATTS
PLATE SEAL TEMPERATURE	175	° C
FREQUENCY FOR OPERATION AT FULL RATINGS	1,700	MC/S
ALTITUDE FOR OPERATION AT FULL RATINGS	60,000	FEET
GRID CIRCUIT RESISTANCE	0.1	MEGOHMS

NOTE: IF THE PLATE DISSIPATION EXCEEDS 2.5 WATTS, ADEQUATE COOLING MUST BE PROVIDED IN ORDER TO STAY WITHIN THE TEMPERATURE RATING.

## TYPICAL OPERATION-OSCILLATOR IN CATHODE-DRIVE CIRCUIT

## RF AMPLIFIER WITH CATHODE DRIVE

## CONTINUOUS COMMERCIAL SERVICE

FREQUENCY	1,700	3,000	MC/S
DC PLATE-TC-GRID VOLTAGE	128	151.5	VOLTS
DC CATHODE-TO-GRID VOLTAGE	8	1.5	VOLTS
FROM A GRID RESISTOR	2,000	5,000	OHMS
DC PLATE CURRENT	25	29	mA
DC GRID CURRENT - APPROX.	4	0.3	mA
USEFUL POWER OUTPUT - APPROX.	475	50	mW

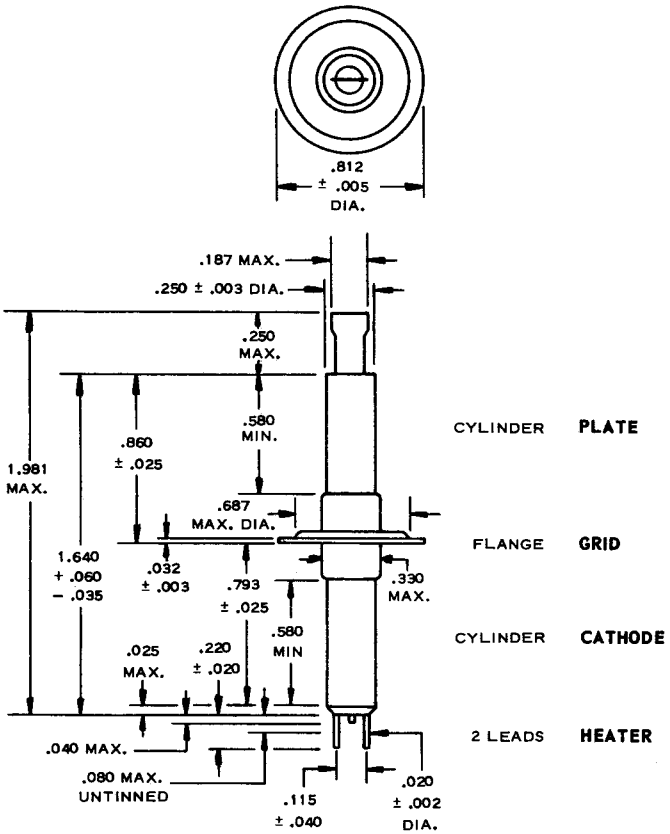
**SPECIAL TESTS AND PERFORMANCE DATA**

CONTROLLED ON A SAMPLING BASIS

VIBRATION TEST  
GLASS SEAL FRACTURE TESTS  
500 HOUR LIFE TEST IN OSCILLATOR

## TUNG-SOL

## OUTLINE DRAWING



ALL DIMENSIONS IN INCHES

