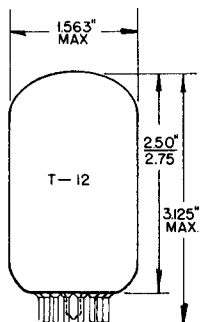


TUNG-SOL

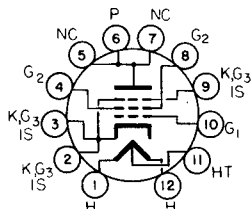
PENTODE



GLASS BULB

BUTTON
12 PIN BASE E12-74
OUTLINE DRAWING
JEDEC 12-57

BEAM POWER VHF PENTODE
COMPACTRON
FOR
RF POWER AMPLIFIER
AND OSCILLATOR APPLICATIONS
ANY MOUNTING POSITION
COATED UNIPOTENTIAL CATHODE



BOTTOM VIEW
BASING DIAGRAM
JEDEC 12DT

PINS 5, 6 & 7 MUST BE
USED IN PARALLEL

THE 8149 IS A BEAM POWER AMPLIFIER PENTODE IN THE SINGLE-ENDED T-12 COMPACTRON DESIGN. IT IS INTENDED FOR USE AS AN RF POWER AMPLIFIER AND OSCILLATOR AT FREQUENCIES UP TO 175 MEGACYCLES, WITH A MAXIMUM PLATE DISSIPATION RATING OF 35 WATTS UNDER ICAS CONDITIONS. IT FEATURES A CENTER-TAPPED HEATER SO IT MAY BE OPERATED FROM EITHER A 3-CELL OR A 6-CELL STORAGE BATTERY SYSTEM. A SIMILAR TUBE IN A DOUBLE-ENDED DESIGN IS REGISTERED AS TYPE 8150.

→ **DIRECT INTERELECTRODE CAPACITANCES**
WITHOUT EXTERNAL SHIELD

GRID 1 TO PLATE: G1 TO P	0.35	pf
INPUT: G1 TO (H+K+G2+G3+I.S.)	13.0	pf
OUTPUT: P TO (H+K+G2+G3+I.S.)	6.0	pf

HEATER CHARACTERISTICS AND RATINGS

ABSOLUTE MAXIMUM SYSTEM - SEE EIA STANDARD RS-239

SUPPLY CONNECTED TO PINS	1 & 12	11 & 1+12	
AVERAGE VALUES - VOLTAGE	13.0	6.5	VOLTS
- CURRENT	0.60	1.20	AMPS.
LIMITS OF APPLIED HEATER VOLTAGE	11.0 - 15.0	5.5 - 7.5	VOLTS
MIXIMUM HEATER-CATHODE VOLTAGE EITHER POLARITY		135	VOLTS

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

AVERAGE STATIC CHARACTERISTICS

PLATE VOLTAGE	200	VOLTS
GRID 2 VOLTAGE	200	VOLTS
PLATE CURRENT	100	MA.
TRANSCONDUCTANCE	7500	μ MHOS
AMPLIFICATION FACTOR, TRIODE CONNECTED	4.5	

MAXIMUM RATINGS

ABSOLUTE MAXIMUM SYSTEM - SEE EIA STANDARD RS-239

RF POWER AMPLIFIER AND OSCILLATOR - CLASS C TELEGRAPHY

RF POWER AMPLIFIER - CLASS C TELEPHONY

ICAS INTERMITTENT COMMERCIAL AND AMATEUR SERVICE

FOR FREQUENCIES UP TO	175	60	MC
PLATE VOLTAGE -DC	450	750	VOLTS
GRID 2 VOLTAGE	250	250	VOLTS
GRID 1 VOLTAGE - DC	-150	150	VOLTS
CATHODE CURRENT-DC	→ 220	→ 220	MA.
PLATE DISSIPATION	35	35	WATTS
GRID 2 DISSIPATION	3.3	3.3	WATTS
BULB TEMPERATURE		240	°C

→ TYPICAL OPERATION

CLASS C AMPLIFIER AT 175 MC/S

PLATE VOLTAGE	380	VOLTS
GRID 2 SUPPLY VOLTAGE	380	VOLTS
GRID 2 DROPPING RESISTOR	10	KOHMS
GRID 1 VOLTAGE	-78	VOLTS
FROM GRID 1 RESISTOR	27	KOHMS
ADDITIONAL FIXED BIAS	-24	VOLTS
PEAK RF GRID 1 VOLTAGE	120	VOLTS
PLATE CURRENT	180	MA.
GRID 2 CURRENT	12	MA.
GRID 1 CURRENT	2.0	MA.
DRIVING POWER - APPROX.	2	WATTS
POWER OUTPUT	40	WATTS

→ INDICATES A CHANGE.