

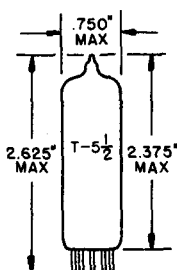
TUNG-SOL**PENTODE**

MINIATURE TYPE

BEAM PENTODE

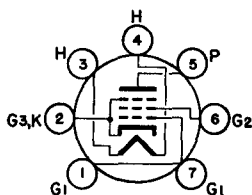
FOR
MOBILE COMMUNICATIONS
EQUIPMENT

COATED UNIPOTENTIAL CATHODE
ANY MOUNTING POSITION



GLASS BULB

MINIATURE BUTTON
7 PIN BASE E7-1
OUTLINE DRAWING
JEDEC 5-3



BOTTOM VIEW

BASING DIAGRAM
JEDEC 7BZ

THE 6669 IS A MINIATURE BEAM-POWER PENTODE DESIGNED FOR USE AS AN AUDIO-FREQUENCY POWER AMPLIFIER.

THE 6669 MAY BE OPERATED WITHOUT SERIOUS DEGRADATION UNDER NORMAL VARIATIONS IN SUPPLY VOLTAGE AS ENCOUNTERED WITH AUTOMOTIVE ELECTRICAL SYSTEMS. ALTHOUGH THE TUBE WILL TOLERATE LARGE HEATER VOLTAGE VARIATIONS FOR SHORT PERIODS, HIGHER EQUIPMENT RELIABILITY CAN BE ACHIEVED WITH IMPROVED SUPPLY-VOLTAGE REGULATION.

THE ELECTRICAL CHARACTERISTICS OF THE 6669 ARE EQUIVALENT TO THE 6AQ5.

DIRECT INTERELECTRODE CAPACITANCES - APPROX.

WITHOUT EXTERNAL SHIELD

GRID 1 TO PLATE	0.4	pf
INPUT	8.0	pf
OUTPUT	8.5	pf

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	6.3	VOLTS	450	MA.
LIMITS OF APPLIED VOLTAGE			6.3±1.25	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE:				
HEATER NEGATIVE WITH RESPECT TO CATHODE			100	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE			100	VOLTS

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TUN-6-SOL

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MAXIMUM RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

PLATE VOLTAGE	275	VOLTS
GRID 2 VOLTAGE	275	VOLTS
PLATE DISSIPATION	12	WATTS
GRID 2 DISSIPATION	2.0	WATTS
GRID 1 CIRCUIT RESISTANCE:		
WITH FIXED BIAS	0.1	MEGOHMS
WITH CATHODE BIAS	0.5	MEGOHMS
BULB TEMPERATURE AT HOTTEST POINT	225°	C

TYPICAL OPERATING CHARACTERISTICS**CLASS A1 AMPLIFIER**

PLATE VOLTAGE	250	VOLTS
GRID 2 VOLTAGE	250	VOLTS
GRID 1 VOLTAGE	- 12.5	VOLTS
PEAK AF GRID 1 VOLTAGE	12.5	VOLTS
ZERO-SIGNAL PLATE CURRENT	45	MA.
MAXIMUM-SIGNAL PLATE CURRENT	47	MA.
ZERO-SIGNAL GRID 2 CURRENT	4.5	MA.
MAXIMUM-SIGNAL GRID 2 CURRENT	7.0	MA.
PLATE RESISTANCE, (APPROX.)	52,000	OHMS
TRANSCONDUCTANCE	4,100	μ MHOS
LOAD RESISTANCE	5,000	OHMS
TOTAL HARMONIC DISTORTION, (APPROX.)	8	PERCENT
MAXIMUM-SIGNAL POWER OUTPUT	4.5	WATTS

PUSH-PULL CLASS AB₁ AMPLIFIER**VALUES FOR TWO TUBES**

PLATE VOLTAGE	250	VOLTS
GRID 2 VOLTAGE	250	VOLTS
GRID 1 VOLTAGE	- 15	VOLTS
PEAK AF GRID TO GRID VOLTAGE	30	VOLTS
ZERO-SIGNAL PLATE CURRENT	70	MA.
MAXIMUM-SIGNAL PLATE CURRENT	79	MA.
ZERO-SIGNAL GRID 2 CURRENT	5.0	MA.
MAXIMUM-SIGNAL GRID 2 CURRENT	13	MA.
EFFECTIVE LOAD RESISTANCE, PLATE-TO-PLATE	10,000	OHMS
TOTAL HARMONIC DISTORTION	5	PERCENT
MAXIMUM-SIGNAL POWER OUTPUT	10	WATTS

SPECIAL TESTS AND RATINGS

HEATER-CYCLING LIFE TEST

