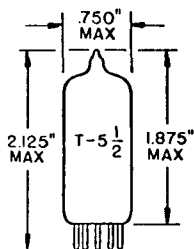


TUNG-SOL

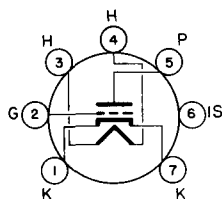
TRIODE

MINIATURE TYPE



GLASS BULB
MINIATURE BUTTON
7 PIN BASE E7-1
OUTLINE DRAWING
JEDEC 5-2

SHIELDED TRIODE
FOR
NEUTRODE CIRCUIT
APPLICATIONS



BOTTOM VIEW
JEDEC 7 FP

THE 3GK5 IS A FRAME GRID GAIN CONTROLLED SHIELDED TRIODE IN THE 7 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED FOR USE AS A VHF RF AMPLIFIER AT A B+ OF 135 VOLTS.

DIRECT INTERELECTRODE CAPACITANCES

WITH SHIELD

GRID TO PLATE	0.52	pf
INPUT: G TO (H + K + I.S. + E.S.)	5.0	pf
OUTPUT: P TO (H + K + I.S. + E.S.)	3.5	pf
HEATER TO CATHODE	2.5	pf

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	2.8 VOLTS	450	MA.
HEATER WARM-UP TIME		11	SECONDS
LIMITS OF SUPPLY	600 ± 40		MA.
HEATER-CATHODE VOLTAGE			
HEATER NEGATIVE WITH RESPECT TO CATHODE			
TOTAL DC AND PEAK		100	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE			
TOTAL DC AND PEAK		100	VOLTS

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MAXIMUM RATINGS

DESIGN MAXIMUM RATINGS - SEE EIA STANDARD RS-239

PLATE VOLTAGE	200	VOLTS
GRID VOLTAGE	-50	VOLTS
PLATE DISSIPATION	2.5	WATTS
DC CATHODE CURRENT	22	MA.
GRID CIRCUIT RESISTANCE - SELF BIAS	1.0	MEGOHMS

CHARACTERISTICS AND TYPICAL OPERATION

CLASS A1 AMPLIFIER

PLATE VOLTAGE	135	VOLTS
GRID VOLTAGE	-1.0	VOLTS
PLATE CURRENT	11.5	MA.
TRANSCONDUCTANCE	15,000	μ MHOS
AMPLIFICATION FACTOR	78	
PLATE RESISTANCE	Approx. 5,400	OHMS
E_c FOR $G_m = 150 \mu$ MHOS	Approx. -4.2	VOLTS
E_c FOR $G_m = 1,500 \mu$ MHOS	Approx. -2.5	VOLTS
HOT INPUT RESISTANCE - 200 Mc/s - GROUNDED PLATE	275	OHMS
HOT INPUT CAPACITANCE - 200 Mc/s - GROUNDED PLATE	11.2	pf
NOISE FIGURE - 200 Mc/s - OPTIMIZED NEUTRALIZED		
TRIODE RF AMPLIFIER STAGE, NOISE MATCHED	4.7	DB