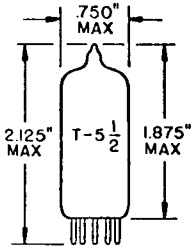
TUNG-SOL

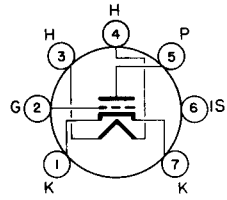
TRIODE

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 SUPPLIED	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

CONTINUED ON FOLLOWING PAGE

CONTINUED FROM PRECEDING PAGE

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	μMHOS
AMPLIFICATION FACTOR		78	
PLATE RESISTANCE	Approx.	5,400	OHMS
E_c FOR G_m = 150 μMHOS	Approx.	-4.2	VOLTS
E_c FOR G_m = 1,500 μMHOS	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