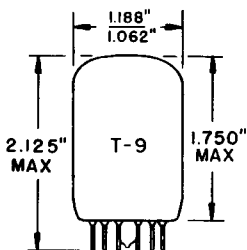


## TUNG-SOL

## DUAL TRIODE

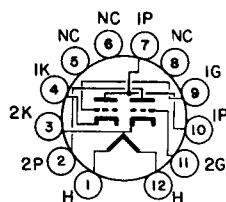
MINIATURE TYPE



GLASS BULB  
BUTTON 12 PIN  
BASE E12-70  
OUTLINE DRAWING

TWO DISSIMILAR TRIODES  
FOR  
SYNC CLIPPER AND  
AGC AMPLIFIER  
SERVICE IN  
TV RECEIVERS

COATED UNIPOTENTIAL CATHODES  
ANY MOUNTING POSITION



BASING DIAGRAM  
JEDEC 12 FR

THE 4HC7 CONTAINS TWO DISSIMILAR TRIODES IN A T-9 COMPACTRON CONSTRUCTION. EACH ELEMENT IS BROUGHT OUT TO A SEPARATE BASE PIN. TRIODE #1 HAS A LOW MU AND TRIODE #2 HAS A HIGH MU. THE 4HC7 IS DESIGNED FOR SYNC CLIPPER AND GATED AGC AMPLIFIER SERVICE IN TV RECEIVERS. THE HEATER IS INTENDED TO BE OPERATED IN A SERIES STRING. EXCEPT FOR HEATER RATINGS, THE 4HC7 IS IDENTICAL TO THE 5HC7

#### DIRECT INTERELECTRODE CAPACITANCES WITHOUT EXTERNAL SHIELD

	TRIODE 1	TRIODE 2	
GRID TO PLATE (g to p)	1.9	2.2	pf
INPUT: g to (h + k)	2.0	1.9	pf
OUTPUT: p to (h + k)	0.7	0.56	pf

#### HEATER CHARACTERISTICS AND RATINGS DESIGN MAXIMUM VALUES-SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	4.2 VOLTS	600	MA.
HEATER WARM-UP TIME		11	SECS.
LIMITS OF SUPPLIED CURRENT		600 ± 40	MA.
MAXIMUM HEATER CATHODE VOLTAGE			
HEATER NEGATIVE WITH RESPECT TO CATHODE			
TOTAL DC AND PEAK		200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE			
DC		100	VOLTS
TOTAL DC AND PEAK		200	VOLTS

CONTINUED ON FOLLOWING PAGE

**TUNG-SOL**

CONTINUED FROM PRECEDING PAGE

**MAXIMUM RATINGS**

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

	TRIODE 1	TRIODE 2	
PLATE VOLTAGE	330	330	VOLTS
NEGATIVE DC GRID VOLTAGE	100	100	VOLTS
POSITIVE DC GRID VOLTAGE	0	0	VOLTS
POSITIVE TRANSIENT GRID VOLTAGE	60	-	VOLTS
PLATE DISSIPATION	3	1.2	WATTS
GRID CIRCUIT RESISTANCE	5.0	5.0	MEGOHMS

**CHARACTERISTICS**

PLATE VOLTAGE	150	150	VOLTS
GRID VOLTAGE	-1	-1	VOLTS
PLATE CURRENT	18	1.0	MA
TRANSCONDUCTANCE	4400	1900	$\mu$ MHOS
AMPLIFICATION FACTOR	23	100	
PLATE RESISTANCE ( APPROX. )	5,200	53,000	OHMS
GRID VOLTAGE FOR $i_b = 10 \mu A$ ( APPROX. )	-13	-2.2	VOLTS