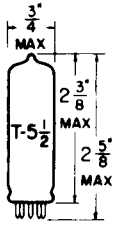
TUNG-SOL

PENTODE

MINIATURE TYPE

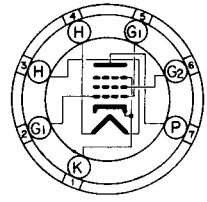


GLASS BULB

COATED UNIPOTENTIAL CATHODE

HEATER
12.6 VOLTS 0.45 AMP.
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
MINIATURE BUTTON
7 PIN BASE
7CV

THE 12DM5 IS A BEAM POWER PENTODE IN THE 7-PIN MINIATURE CONSTRUCTION AND IS INTENDED FOR APPLICATION AS AN AUDIO POWER OUTPUT TUBE IN TELEVISION RECEIVERS. THERMAL CHARACTERISTICS OF THE HEATER ARE CONTROLLED SUCH THAT HEATER VOLTAGE SURGES DURING THE WARM-UP CYCLE ARE MINIMIZED PROVIDED IT IS USED WITH OTHER TYPES WHICH ARE SIMILARLY CONTROLLED.

DIRECT INTERELECTRODE CAPACITANCES
WITHOUT EXTERNAL SHIELD

GRID TO PLATE: G_1 TO P	0.55	μμf
INPUT: G_1 TO K+H+G_1+B.P.	13	μμf
OUTPUT: P TO K+H+G_2+B.P.	9	μμf

RATINGS
INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HEATER VOLTAGE	12.6	VOLTS
MAXIMUM PLATE VOLTAGE	135	VOLTS
MAXIMUM GRID #2 VOLTAGE	117	VOLTS
MAXIMUM PLATE DISSIPATION	5.5	WATTS
MAXIMUM GRID #2 DISSIPATION	1.25	WATTS
MAXIMUM GRID CIRCUIT RESISTANCE		
FIXED BIAS	0.1	MEGOHMS
CATHODE BIAS	0.5	MEGOHMS
MAXIMUM PEAK HEATER-CATHODE VOLTAGE		
HEATER NEGATIVE WITH RESPECT TO CATHODE	200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE[A]	200	VOLTS
MAXIMUM BULB TEMPERATURE (AT HOTTEST POINT)	250	°C
HEATER WARM-UP TIME (APPROX.)*	11.0	SECONDS

[A] DC COMPONENT MUST NOT EXCEED 100 VOLTS MAX.

*HEATER WARM-UP TIME IS DEFINED AS THE TIME REQUIRED FOR THE VOLTAGE ACROSS THE HEATER TO REACH 80% OF ITS RATED VOLTAGE AFTER APPLYING 4 TIMES RATED HEATER VOLTAGE TO A CIRCUIT CONSISTING OF THE TUBE HEATER IN SERIES WITH A RESISTANCE OF VALUE 3 TIMES THE NOMINAL HEATER OPERATING RESISTANCE.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

HEATER VOLTAGE	12.6	VOLTS
HEATER CURRENT	0.45	AMP.
PLATE VOLTAGE	110	VOLTS
GRID #2 (SCREEN) VOLTAGE	110	VOLTS
GRID #1 (CONTROL-GRID) VOLTAGE	7.5	VOLTS
PLATE RESISTANCE (APPROX.)	14 000	OHMS
TRANSCONDUCTANCE	7 500	μMHOS
GRID #1 INPUT VOLTAGE, PEAK AF	7.5	VOLTS
PLATE CURRENT, ZERO SIGNAL	49	MA.
PLATE CURRENT, MAXIMUM SIGNAL	50	MA.
GRID #2 CURRENT, ZERO SIGNAL	4.0	MA.
GRID #2 CURRENT, MAXIMUM SIGNAL	8.5	MA.
LOAD RESISTANCE IMPEDANCE	2 500	OHMS
TOTAL HARMONIC DISTORTION (APPROX.)	9	PERCENT
POWER OUTPUT, MAXIMUM SIGNAL	1.9	WATTS