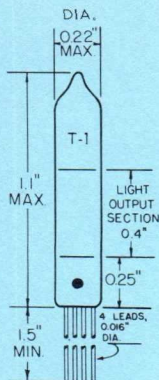


TUNG-SOL

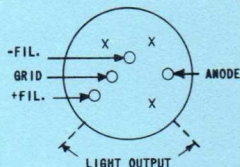
INDICATOR TRIODE
SUBMINIATURE TYPE

GLASS BULB
DOT INDICATES CENTER
LINE OF LIGHT OUTPUT
AREA

4 TINNED LEADS
0.016 DIA.

FOR
LOW VOLTAGE APPLICATIONS

FILAMENTARY CATHODE
ANY MOUNTING POSITION



BOTTOM VIEW

DOT ON LIGHT OUTPUT AXIS
O - LEAD WIRE
X - CLIPPED OFF LEAD

→ THE 6977 IS A FILAMENTARY, HIGH-VACUUM SUBMINIATURE INDICATOR TRIODE. ITS GRID-SHAPED PLATE IS COATED WITH A PHOSPHOR WHICH GIVES A BRIGHT BLUE-GREEN LIGHT PROPORTIONAL TO THE PLATE CURRENT. IT IS DESIGNED FOR APPLICATIONS IN ELECTRONIC COMPUTERS, WHERE ITS SMALL SIZE, LOW ENERGY REQUIREMENTS, HIGH SENSITIVITY AND FREEDOM FROM NOISE MAKE IT VERY USEFUL IN COMBINATION WITH TRANSISTORIZED CIRCUITS. THE TUBE IS CONTROLLED TO MILITARY STANDARDS FOR HIGH RELIABILITY.

DIRECT INTERELECTRODE CAPACITANCES

WITHOUT EXTERNAL SHIELD

GRID TO PLATE	1.8	pf
GRID TO FILAMENT	1.0	pf
PLATE TO FILAMENT	1.1	pf

FILAMENT CHARACTERISTICS AND RATINGS

ABSOLUTE MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	1.0	VOLTS	30	MA.
SUPPLY			AC OR DC	
LIMITS OF APPLIED FILAMENT VOLTAGE			0.95-1.05	VOLTS

→ INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

MAXIMUM RATINGS

ABSOLUTE MAXIMUM VALUES - SEE EIA STANDARD RS-239

PLATE VOLTAGE	65	VOLTS
POSITIVE GRID SUPPLY VOLTAGE	0	VOLTS
NEGATIVE GRID VOLTAGE	50	VOLTS
PLATE CURRENT	750	μ A
GRID CIRCUIT RESISTANCE	1	MEGOHMS
MINIMUM GRID CIRCUIT RESISTANCE	0.1	MEGOHMS

AVERAGE CHARACTERISTICS

FILAMENT: DC, NEGATIVE GROUNDED

PLATE VOLTAGE	50	VOLTS
GRID VOLTAGE	0	
PLATE CURRENT	440	μ A
TRANSCONDUCTANCE	450	μ MHOS
AMPLIFICATION FACTOR	30	

TYPICAL OPERATION

FILAMENT: SUPPLIED FROM TRANSFORMER, CENTER TAP GROUNDED

PLATE VOLTAGE	50	VOLTS
GRID RESISTOR	10C	KOHMS
WITH GRID SUPPLY VOLTAGE 0		
PLATE CURRENT	580	μ A
LIGHT OUTPUT	6	mCANDLES
WITH GRID SUPPLY VOLTAGE -3.0 VOLTS		
PLATE CURRENT	<5	μ A
LIGHT OUTPUT	NOT VISIBLE	

NOTE:

LIGHT OUTPUT MEASURED BY COMPARISON WITH A TUNGSTEN LAMP OF 2,870 °K COLOR TEMPERATURE USING AN S4 PHOTO DEVICE.

