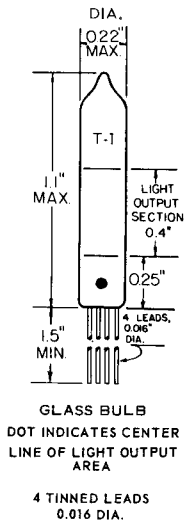
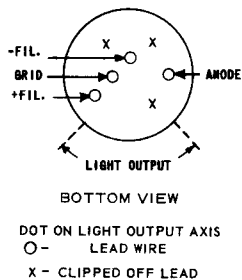


TUNG-SOL

INDICATOR TRIODE
SUBMINIATURE TYPE

FOR
LOW VOLTAGE APPLICATIONS

FILAMENTARY CATHODE
ANY MOUNTING POSITION



→ 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 STANDRD 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 | |

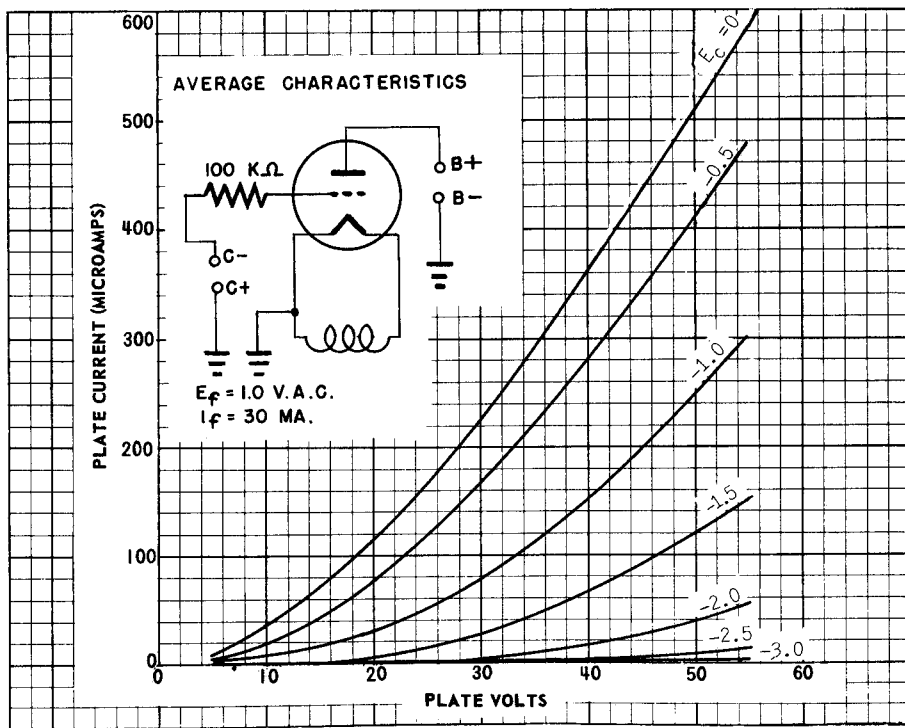
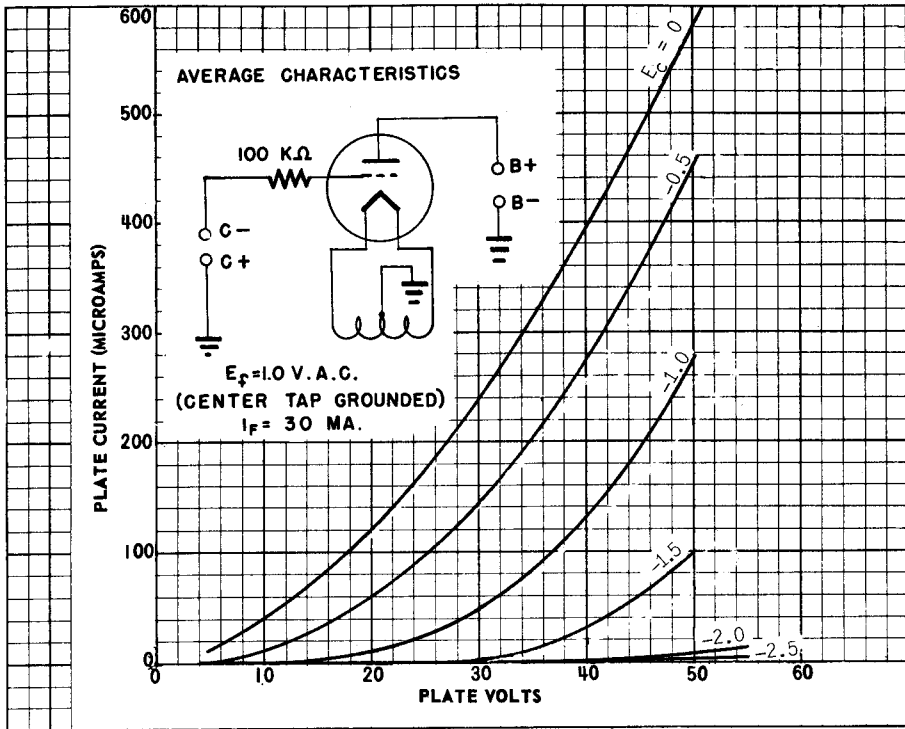
TYPICAL OPERATION

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.



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