VACUUM PHOTOTUBE
WITH S-5 RESPONSE

DATA

General:
Spectral Response ........................................ S-5
Wavelength of Maximum Response. ........... 3400 ± 500 Angstroms

Cathode:
Shape ................................................................. Semi-Cylindrical
Minimum Projected Length* ..................... 1-5/16"
Minimum Projected Width* ...................... 5/8"
Direct Interelectrode Capacitance ............. 0.6 µf
Overall Length ............................................... 4-1/8" ± 1/8"
Seated Length ............................................... 3-9/16" ± 1/8"
Seated Length to Center of Cathode .......... 2" ± 1/16"
Maximum Diameter ......................................... 1-9/32"
Bulb. ................................................................. T-9
Mounting Position ............................................. Any
Cap ................................................................. Skirted Miniature
Base ............................................................. Intermediate-Shell Octal 5-Pin

Pin 1 - No Connection ............................... Pin 6 - No Connection
Pin 2 - No Connection ............................... Pin 8 - Cathode
Pin 4 - No Connection ............................... Cap - Anode

Maximum Ratings, Absolute Values:
ANODE-SUPPLY VOLTAGE (DC or Peak AC) .... 250 max. ... volts
PEAK CATHODE CURRENT .............................. 30 max. ... µamp
PEAK CATHODE-CURRENT DENSITY ............ 100 max. ... µamp/sq.in.
AVERAGE CATHODE CURRENT .................... 10 max. ... µamp
AMBIENT TEMPERATURE .............................. 75 max. ... °C

Characteristics:

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<th>Min.</th>
<th>Av.</th>
<th>Max.</th>
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<tr>
<td>Dark Current at 250 Volts</td>
<td>-</td>
<td>-</td>
<td>0.0005 µamp</td>
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Sensitivity:
At 3400 Angstroms ................................. 0.032 µamp/µwatt
Luminous ........................................ 18 35 70 µamp/lumen

* On plane perpendicular to indicated direction of incident radiation.
  ▲ Averaged over any interval of 30 seconds maximum.

Measured under conditions specified on sheet "PHOTOTUBE SENSITIVITY AND SENSITIVITY MEASUREMENTS" at the front of this Section.

SPECTRAL-SENSITIVITY CHARACTERISTIC
of Phototube having S-5 Response
is shown at the beginning of this Section

Indicates a change.

JULY 3, 1950

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY
Vacuum Phototube

SIDE-ON TYPE HAVING S-5 RESPONSE

DATA

General:
Spectral Response ........................................... S-5
Wavelength of Maximum Response ........... 3400 ± 500 angstroms
Cathode:
Shape ........................................................ Semicylindrical
Minimum projected length* .................. 1-5/16"
Minimum projected width* .................. 5/8"
Direct Interelectrode Capacitance (Approx.) ....... 0.6 μf
Maximum Overall Length ...................... 4-1/4"
Seated Length ........................................... 3-9/16" ± 1/8"
Seated Length to Center of Cathode ........... 2" ± 1/16"
Maximum Diameter ........................... 1-9/32"
Operating Position ..................... Any
Weight (Approx.) ................................. 1 oz ←
Bulb ............................................. T9
Cap ................................................ Skirted Miniature (JEDEC No.C1-3) ←
Socket ........................................ Cinch No.BJM-1, or equivalent ←
Base ........................................ Intermediate-Shell Octal 5-Pin, Arrangement 1 ←
(JEDEC Group 1, No.B5-10)
Basing Designation for BOTTOM VIEW .......... 1C

DIRECTION OF RADIATION

Pin 1—No Internal Connection
Pin 2—No Internal Connection
Pin 4—No Internal Connection
Pin 6—No Internal Connection
Pin 8—Photocathode Cap—Anode

Maximum Ratings, Absolute—Maximum Values:
ANODE—SUPPLY VOLTAGE
(DC or Peak AC) .......................... 250 max. volts
AVERAGE CATHODE—CURRENT DENSITYb .......................... 30 max. μA/sq.in.
AVERAGE CATHODE CURRENTb .......................... 10 max. μA
AMBIENT TEMPERATURE .................. 75 max. °C

Characteristics:
With an anode-supply voltage of 250 volts
Min. Median Max.

Sensitivity:
Radiant, at 3400 angstroms ......... 0.043 ....... amp/watt
Luminousc ................................... 18 35 70 μA/lumen
Anode Dark Current at 25°C .............. 0.0005 μA

← Indicates a change.
SPECTRAL-SENSITIVITY CHARACTERISTIC
OF PHOTOSENSITIVE DEVICE HAVING S-5 RESPONSE
is shown at the front of this section

RADIO CORPORATION OF AMERICA
Electron Tube Division Harrison, N. J.