Vacuum Phototube

COMPOSITE-ANODE-CATHODE, SIDE-ON TYPE HAVING S-4 RESPONSE

DATA

General:
Spectral Response ........................................... S-4
Wavelength of Maximum Response. ...................... 4000 ± 500 angstroms
Cathode:
Shape .......................................................... Flat
Minimum projected length ............................ 19/32"
Minimum projected width ................................ 1/4"
Direct Interelectrode Capacitances (Approx.):
Between base pins 4 and 8 (C1) ......................... 1 μf
Balancing capacitance (C2) ............................... 1 μf
Capacitance Difference between C1 and C2 ........ 0.3 max. μf
Maximum Overall Length .................................. 2-7/8"
Maximum Seated Length .................................. 2-5/16"
Seated Length to Center of Cathode ................. 1-5/8" ± 3/32"
Maximum Diameter ........................................... 1-9/32"
Operating Position .......................................... Any
Weight (Approx.) ............................................ 1 oz
Bulb .......................................................... T9
Socket .......................................................... Cinch No.8JM-1, or equivalent
Base .......................................................... Intermediate-Shell Octal 5-Pin, Arrangement 1
(JEDEC Group 1, No.85-10) Non-hygroscopic
Basing Designation for BOTTOM VIEW ............... 2AB

DIRECTION OF LIGHT

Pin 1 - No Internal Connection
Pin 2 - Balancing Capacitance
Pin 4 - Anode or Photo-Cathode
Pin 6 - No Internal Connection
Pin 8 - Anode or Photocathode

Maximum Ratings, Absolute-Maximum Values:
ANODE-SUPPLY VOLTAGE (DC or Peak AC) .......... 250 max. volts
AVERAGE CATHODE-CURRENT DENSITYc .............. 30 max. μa/sq.in.
AVERAGE CATHODE CURRENTc ............................ 4 max. μa
AMBIENT TEMPERATURE ................................. 75 max. °C

Characteristics:
With an anode-supply voltage of 250 volts
Min. Median Max.
Sensitivity:
Radiant, at 4400 angstroms .............................. 0.044 45 70 μa/watt
Luminous .................................................. 19 45 70 μa/lumen
Ratio of Cathode Luminous
Sensitivities ............................................. 0.42 1.0 2.4
Anode Dark Current at 25° C ............................. - 0.01 μa

--- indicates a change.
SPECTRAL-SENSITIVITY CHARACTERISTIC
OF PHOTOSENSITIVE DEVICE HAVING S-4 RESPONSE
is shown at the front of this section
TYPICAL OPERATION CHARACTERISTICS
With AC Voltage Applied Between the Two Electrodes

LIGHT SOURCE IS A TUNGSTEN-FILAMENT LAMP
OPERATED AT A COLOR TEMPERATURE OF 2870° K.
LOAD RESISTANCE : ZERO
DASHED CURVE A STATIC CHARACTERISTIC FOR ONE
ELECTRODE WITH 0.1 LUMEN
DASHED CURVE B STATIC CHARACTERISTIC FOR OTHER
ELECTRODE WITH 0.1 LUMEN
CURVE C OPERATION CURVE OBTAINED FROM STATIC
CURVES A & B, OTHER OPERATION CURVES
OBTAINED SIMILARLY

RADIO CORPORATION OF AMERICA
Electronic Components and Devices
Harrison, N. J.
DATA Z 9-63