Products

# Technical Specifications - 14" CPT - JCTEL A34JRH61X



## • Electrical Data

| | | | |
|---|---|---|---|
| **Electron Gun** | Unitized (one piece) triple aperture electrodes, Centre Beam (Green), Side beam (Blue, Red) | **Heater Current at 6.3 volts** | 320 mA |
| **Focusing Method** | Electrostatic | **Focussing Lens** | High-focus Bi- Potential |
| **Convergence Method** | Magnetic | **Deflection method** | Magnetic |
| **D A (Approx.): Diagonal** | 90 deg | **DA - DIEC (Approx.): Grid No.1 to all other electrodes** | 9 pF |
| **DA - DIEC (Approx.):A1l Cathodes to all other electrodes** | 7 pF | **DA - DIEC (Approx.): Grid No.3 to all other electrodes** | 4 pF |
| **External conductive coating to anode** | 800 min. pF | - | - |

Note: DA = Deflection Angles DIEC = Direct Inter Electrode Capacitance

## • Optical Data

| | | | |
|---|---|---|---|
| **Light transmission at centre (approx.)** | 57% | **Screen on inner surface of face plate** | Aluminized, Tricolor, Phosphor Stripe, Hybrid Type Black Stripe Screen |
| **Phosphor (three separate phosphor collectively)** | P22 New Rare Earth (Red) Sulphide(Blue & Green) Type | **Arrangement** | Vertical line Trios |
| **Spacing* : Horizontal Centre** | 0.70 mm<br>0.028 in | **Spacing* : Side** | 0.82 mm<br>0.032 in |
| **Spacing* : Vertical** | 0.63 mm<br>0.025 in | - | - |

Note : *Spacing = Spacing between centres of adjacent stripe trios (approx.)

## • Mechanical Data

| | | | |
|---|---|---|---|
| **Overall length** | 332.4 ± 6.5 mm<br>13.09 ± 0.26 in | **Screen: Diagonal (projected)** | 335.4 mm<br>11.06 in |
| **Screen: Horizontal axis** | 280.8 mm<br>11.06 in. | **Screen: Vertical axis** | 210.6 mm<br>8.29 in. |
| **Screen - Area** | 580 cm? (90 sq. in.) | **Base Designation** | See 3284PS 0540-901-12 |
| **Bulb: Contact Designation** | Recessed Small Cavity Cap (JEDEC No. J1-21 {D}) | **Bulb: Funnel** | JEDEC No. (EIAJ J370BLI) |
| **Bulb: Panel** | JEDEC No. (EIAJ J370CVI) | **Pin Position Alignment** | Pin No.1 aligns approx.with anode contact |
| **Implosion Protection** | Banded Type | **Weight (Approx.)** | 6.0 kg (13.2 lbs) |

## • Ratings

(Design –Maximum Values)

Unless otherwise specified, voltage values are for each Gun and values are positive with respect to Cathode.

| | | | |
|---|---|---|---|
| **Anode Voltage** | 25,000 max. volts<br>16,000 min. volts. | **Total Anode Current, Long-term Average** | 700 max. micronA |
| **Grid No.3 (Focusing Electrode)** | 7,500 max.volts | **Peak grid No.2 voltage, including video signal Voltage** | 1,000 max.volts |
| **CV: Positive Bias Value** | 400 max. volts | **CV: Positive Operating Cut-off Value** | 200 max. volts |
| **CV: Negative Bias Value** | 0 max. volts | **CV: Negative Peak Value** | 2 max. volts |
| **Heater Voltage (AC or** | 6.9 max. volts rms | **Surge of heater** | 9.5 max. volts rms |

| | | | |
|---|---|---|---|
| **DC)** | 5.7 min. volts rms | **Voltage (within 100 msec.)** | |
| **PHCV: Heater negative with respect to Cathode** | 200 max. volts | **PHCV: Heater positive with respect to Cathode: AC component** | 200 max. volts |
| **PHCV: Heater positive with respect to Cathode: DC component** | 0 max. volts | **Peak Heater – Heater Voltage (Operating with pulse of F.B.T)** | 22 max. volts |

NOTE: * CV = Cathode Voltage **PHCV = Peak Heater-Cathode Voltage

## • Examples of Use of Design Ranges

Unless and other specified voltage values are for each gun and are positive with respect to Cathode.

| | | | |
|---|---|---|---|
| **Anode Voltage** | 22,000 volts | **Grid No.3 (focussing electrode)** | 5,720 to 6,600 volts |
| **Grid No.2 voltage when circuit design utilizes Cathode voltage of 160 volt** | 460 to 820 volts (for visual extinction of focussed spot) | **Heater Voltage - Under operating condition** | 6.3 volts rms |

Note: For maximum cathode life, it is recommended that the heater supply may be regulated.

## • Yoke Data

Electrical Data (Type – IV)

| | |
|---|---|
| **Horizontal Deflection coils: Inductance (at 1Vrms and 1KHz)** | 2.49 ± 5 % mH |
| **Horizontal Deflection coils: Resistance (at 20° C)** | 3.37 ± 10% ohm |
| **Vertical Deflection coils: Inductance (at 1Vrms and 1 KHz)** | 24.3 ± 7 % mH |
| **Vertical Deflection coils: Resistance (at 20° C)** | 12.9 ± 10 % ohms |
| **Peak Pulse voltage across horizontal coils at 15.750 Hz. for a pulse duration of 12 micron sec** | 1400 max. V |
| **Peak Pulse voltage across vertical coils at 50 Hz. for a pulse duration of 0.7 micron sec** | 200 max. V |
| **Peak Pulse voltage including DC component between horizontal and vertical coils** | 1400 max. V |

## • Sagital Heights and Mounting Lug Height

One of the four Mounting Lugs may deviate (2.0 mm max.) from the place of the other three within the 2.0 mm tolerance. This deviation is incorporated in the 2.0 mm tolerance.