

21" CPT - JCTEL A51JSY61X03(H)

Technical Specifications



- [1. Electrical Data](#)
- [2. Optical Data](#)
- [3. Mechanical Data](#)
- [4. Ratings](#)
- [5. Examples of Use of Design Ranges](#)
- [6. Yoke Data](#)
- [7. Sagittal Heights and Mounting Lug Height](#)

1. Electrical Data

Electron Gun	Unitized (one piece) triple aperture electrodes centre beam (Green), side beam (Blue, Red)	Heater Current at 6.3 volts	680mA
Focusing Method	Electrostatic	Focus lens	Bi-Potential, Uni-Potential
Convergence Method	Magnetic	Deflection Method	Magnetic
Deflection Angles (Approx.): Diagonal	90 deg.	Direct Interelectrode Capacitance (Approx.) Grid No.1 to all other electrodes	12 pF
All cathodes at all other electrode	15 pF	Grid No.3 to all other electrodes	5 pF
External conductive coating to anode	2000 max. pF, 1500 min. pF	.	.

2. Optical Data

Light Transmission at Centre(Approx.)	52.0%	Screen on Inner Surface of Faceplate	Aluminized, Tricolour, Phosphor-Stripe, Black Matrix Type Stripe Screen
Phosphor(three separate phosphor,collectively)	P22-New Rare-Earth (Red) Sulphide(Blue & Green) Type	Arrangement	Vertical Line Trios
*Spacing: Horizontal	0.74 mm (0.029 in.)	*Spacing: Vertical	0.63 mm (0.025 in.)

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

3. Mechanical Data

Overall Length	436.7 ± 6.5 mm (17.19 ± 0.26 in.)	Screen** : Diagonal	508.00 mm (20.00 in.)
Screen**: Horizontal Axis	406.4 mm (16.00 in.)	Screen**: Vertical axis	304.8 mm (12.00 in.)
Screen**: Area	1239 sq. cm	Base Designation	BIO - 277
Bulb: Contact Designation	Recessed Small Cavity Cap (EIA No. J1 - 21)	Bulb: Funnel	EIAJ J540F1
Bulb: Panel	EIAJ JP540AU11	Pin Position Alignment	Pin No.10 aligns approx.with Anode contact
Implosion Protection	Banded Type with Mounting Lugs	Weight (Approx.)	15.5 Kg (34.2 lbs)

Note: ** Minimum Useful Screen Dimension (Projected)

4. Ratings

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

Anode Voltage	27,500 absolute max. volts 20,000 min. volts	Total Anode Current, Long-term Average	1100 max. micronA
Grid-No.3&5 (Focusing Electrode) Voltage	10,000 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 DC)	6.9 max. Vrms/5.7 max Vrms	Surge of Heater Voltage (within 100 msec)	9.5 max. Vrms
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. V _{p-p}

Note: CV = Cathode Voltage

PHCV = Peak Heater-Cathode Voltage

5. Examples of Use of Design Ranges

Unless otherwise specified, voltage values are for each Gun and are positive with respect to Grid No.1.

Anode Voltage	25,000 Volts
Grid No. 3 & 5 (Focusing Electrode)	7,880 to 8,870 Volts
Grid No. 2 Voltage when circuit design utilises Cathode Voltage of 160 volts for visual extinction of focused spot	460 to 820 Volts
Heater voltage (Note 1) : Under operating condition	6.3 Vrms

6. Yoke Data

Electrical - Horizontal Deflection Coils: Inductance (at 1 Vrms and 1 KHz)	1.93 ± 5 % mH
Electrical - Horizontal Deflection Coils: Resistance (at 200 C)	2.20 ± 10 % ohm
Electrical - Vertical Deflection Coils: Inductance (at 1 Vrms and 1 KHz)	30.0 ± 10 % mH
Electrical - Vertical Deflection Coils: Resistance (at 200 C)	14.5 ± 10 % ohm
Max Ratings: Absolute Max.Values - Peak Pulse Voltage Across Horizontal Coils at 15,750 Hz for a pulse duration of 12 micron sec	14,000 max.V
Peak Pulse Voltage Across Vertical Coils at 50 Hz for pulse duration of 0.7 msec	200 max. V
Peak Pulse Voltage including DC component between Hor. and Ver. coils	1400 max. V

7. Sagittal 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.

Информация подготовлена по материалам официального сайта JCT Electronics Limited.