Products

Technical Specifications 21" PFT - A51MBG61X06(47.7)

• Electrical Data

Electron Gun	Unitized (one piece) triple aperture electrodes Centre beam (Green), side beam (Blue, Red)	**Heater Current at 6.3 volts**	335 mA
Focusing method	Electrostatic	**Focus Lens**	Multi-Element
Convergence Method	Magnetic	**Deflection Method**	Magnetic
Deflection Angles (Approx.): Diagonal	90 deg.	**Direct inter-electrode capacitance (approx.):**	11 pF
All cathodes at all other electrode	15 pF	**Grid No.3 to all other electrodes**	10 pF
External conductive	2000 max. pF, 1500 min. pF	**-**	-

• Optical Data

Light Transmission at Centre(Approx.)	55.0%	**Screen on Inner Surface of Faceplate**	Aluminized, tricolour, black Stripes
Phosphor	P22-New Rare-Earth (Red) Sulphide(Blue & Green) Type	**Arrangement stripe**	Vertical Line Trios
Spacing between Centers of adjacent Phosphor trios (Approx.)	0.70 mm		

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

• Mechanical Data

Overall Length	423.43 6.5 mm	**Screen : Diagonal**	506.00 mm
Screen : Horizontal	406.4 mm	**Screen: Vertical axis**	303.30 mm
Screen Area	min 1229 sq. cm	**Base Designation**	B 10 - 277
Bulb Contact Desgination	Recessed Small Cavity	**Bulb: Funnel**	EIAJ J540F1
Bulb : Panel	Cap(EIA no. 13N)	**Pin Position Alignment**	Pin No.10 aligns approx.with Anode contact
Implosion Protection	EIAJ J540AU11	**Weight**	15.7 Kg

Note: ** Minimum Useful Screen Dimension (Projected)

• Ratings

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

Anode Voltage	30 KV max	**Total Anode Current, Long-term Average**	1100 max. micronA
Grid-No.3&5 (Focusing Electrode) Voltage	12 KV max	**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**	1500 V max
CV: Negative Bias Value	0 max. Volts	**CV: Negative PeakValue**	200 V max
Heater Voltage (AC rms DC)	6.6 V max / 5.7 V min	**Surge of Heater Voltage (within 100 msec)**	2 V max
Peak Heater Cathode Voltage			
Heater negative with respect to cathode	450 V Volts	**Heater positive with respect** to cathode	200 max Volts

Note: CV = Cathode Voltage PHCV = Peak Heater-Cathode Voltage

• 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	27.5 KV
Grid No. 3 Voltage (Focusing voltage)	27% of anode voltage
Grid No. 2 cathode voltage for visual extinction of focused spot	460 to 820 Volts
Heater Voltage : Under operating conditions	6.3 Vrms

• Yoke Data

Electrical – Horizontal Deflection Coil – Inductance	1.98 mh ± 10%
Electrical – Horizontal Deflection Coil – Resistance	3.4 ohm ± 10%
Electrical – Vertical Deflection Coil – Inductance	13.1 mh ± 10%
Electrical – Vertical Deflection Coil – Resistance	7.8 ohm ± 10%
Max Ratings : Absolute max. Values – Peak Pulse Voltage across Horizontal Coils at 15,750 Hz for a pulse of 9µ sec	14,000 max.V
Peak to Peak Deflection Current at 27.5 KV, Edge to Edge Scan, Typical	1.30 A

• 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.