

DEVELOPMENT SAMPLE DATA

This information is derived from development samples made available for evaluation. It does not necessarily imply that the device will go into regular production.

M38-200

VERY HIGH RESOLUTION CATHODE-RAY TUBE

The M38-200 is a 38 cm, 70° data graphic display tube with a resolution of more than 6,6 line pairs per mm (corresponding to 3000 TV lines). Used in conjunction with deflection unit AT1991 it is eminently suitable for full page document display.

The resolution easily meets the stringent requirements of the CCITT recommendations for digital group III, high resolution facsimile transmission, and those of graphic displays for computer-aided design.

Tubes with white (W) or green (GH) screen phosphors are available. They have a metal backed screen and rim band for implosion protection.

QUICK REFERENCE DATA

Deflection angle	70°
Face diagonal	38 cm
Overall length	478 mm
Neck diameter	36,8 mm
Screen dimensions	226 mm x 291 mm
Resolution	1728 x 2288 pixels*

blue binder, tab 4

* Pixel = picture element.



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ELECTRICAL DATA

Capacitances

cathode to all other electrodes

 C_k 4 pF

grid 1 to all other electrodes

 C_{g1} 12 pF

final accelerator to external conductive coating

 $C_{g3, g5(l)/m}$ 1100 pF

final accelerator to tension band

 $C_{g3, g5(l)/m'}$ 220 pF

Focusing method

electrostatic

Deflection method

magnetic*

Deflection angle

approx. 70°

Heating

indirect by a.c. or d.c.

heater voltage

 V_f 6,3 V ± 5 %

heater current

 I_f 190 mA****OPTICAL DATA**

Screen

metal-backed phosphor

Phosphor type

GH	W
green	white
medium	medium
short	

fluorescent colour

green

persistence

medium

short

Screen dimensions

226 mm x 291 mm

Minimum useful screen diagonal

352 mm

Preferable useful scanning area

200 mm x 270 mm

Reduction for A4 size (297 mm x 210 mm)

9%

Reduction for 11" x 8½" size (279 mm x 216 mm)

7,4%

Light transmission of screen

approx. 50%

* To obtain the best tube performance, deflection unit AT1991 should be used.

** Liable to be modified into 240 mA.

