

SPECIFICATION

PRODUCT DESCRIPTION:

4 Inch Flat B/W CRT Module(20MM CHINESE TUBE)
MODEL:AN-B20

ELECTRICAL CHARACTERISTICS

- 1) Rated Voltage: DC 12.5V
- 2) Rated Current: DC 490mA±20MA
- 3) Distance: 200m (by using RG-59/64 video cable)
- 4) Input Signal: CCIR or NTSC is optional, Sync Negative Unbalanced Video/Composite,1Vp-p/75-Ohm
- 5) Operating Temperature: - 10 ~ +55 °C
- 6) Storage Temperature: -20 ~ +60 °C
- 7) Relative Humidity: 10 ~ 95% (RH)

ABSOLUTE MAXIMUM RATINGS

- 1) Power Supply DC 12.5 ~ 18V(Low drop out type:DC10.8~18V)
power supply load ability 0.7A; Wave is less than 0.3Vp-p
 - 2) Video Signal 0.7~ 1.4Vp-p
- 1 RED Power Positive(+12V)
B+: DC 12.5~18V
DC 10.8~18V
- 2 BLACK Power Negative(GND) GND
3 BLACK Video GND GND
4 YELLOW Video Input
- VI:
CCIR/EIA,0.7~1.4Vp-p

EXTERNAL CONNECTIONS(PARTS AND DIAGRAM)

- 1) CN301: 4-pin cable (C3, 2.54mm), for Video and Power
- 2) CN302: 6-pin cable (C3, 2.54mm), for (1k) contrast, (50)k brightness
- 3) STANDARD CABLE: C3-4P-300mm, C3-6P-300mm(UL1007-24#)

PRODUCT OVERVIEW

DIMENSIONS Approx. 204(L) X 104(W) X 42(H) mm

NET WEIGHT Approx. 550g

ELECTRICAL CHARACTERISTICS AND TESTING CONDITION

- 1) Testing Condition
 - a) Temperature: 15 ~ 35 °C

b) Humidity: 45 ~ 90% (RH)

c) Position: Standard position, East-ward, no disturbance, Horizontally flat.

2) ELECTRICAL CHARACTERISTICS

No. Parameter Unit Value or Scale

1 Rated Power W < 6

2 INPUT SIGNAL (75-Ohm Impedance) Vp-p 0.7 ~ 1.4

3 PICTURE RATIO (WIDTH vs. HEIGHT) \ 4 : 3

4 Picture reproducing ratio % ≥ 80

5 CENTER OFFSET % ≤ 3

6 SCREEN MAX. BRIGHTNESS Cd/m² ≥ 100

7 BRIGHTNESS ID. CLASS LEVEL ≥ 10

8 HORIZONTAL RESOLUTION (CENTER) TV LINES ≥ 450

9 RASTER GEOMETRY DISTORTION(Center) % ≤ 5

10 SCAN LINEARITY DISTORTION (Center) % ≤ 12

11

(CCIR)SCAN FREQUENCY :

HORIZONTAL PUT IN SCALE 15 625 \pm 200 Hz

HORIZONTAL HOLD SCALE 15 625 \pm 400 Hz

VERTICAL SYNC SCALE 47 \pm 3 Hz

12

(EIA) SCAN FREQUENCY :

HORIZONTAL PUT IN SCALE 15 734 \pm 200 Hz

HORIZONTAL HOLD SCALE 15 734 \pm 400 Hz

VERTICAL SYNC SCALE 57 \pm 3 Hz

13 ANODE HIGH VOLTAGE STABILITY % ≤ 10

14 AMPLIFIER RESPONSE (+1dB~-3dB) MHz ≥ 8

15 CHANNEL LINEARITY RESPONSE

K50 $\leq 5\%$

Kb $\leq 5\%$

16 CHANNEL DIRECT CURRENT DISTORTION % ≤ 30

17 INPUT IMPEDANCE V

Standard: DC 12.5~18.0

Low drop out: DC10.8~18

18 VIDEO INPUT IMPEDANCE K-Ohm ≥ 100

19 RASTER MODULATE DISTURBANCE \ NO Distinctness

20 DISTURBANCE \ NO Distinctness

Testing Method: Standard climate and environment adaptability test, mechanism adaptability requirement, and test method.

1

Read GB/T 15211-1994 for reference.

No. Test item Situation Remark

1 High temperature test 55℃, Operating for 4 hours GDS test machine

2

High temperature

storage test

Storage in 60℃ for 4 hours GDS test machine

3

Invariableness wet and hot test

TEST IN 40℃, 93%(RH) for 48 hours

Rest for 2 hours, all maintain standard

GDS test machine

4 Low temperature test -10℃, Operating for 4 hours GDS test machine

5 Low temperature storage test

Storage in -20℃ for 4 hours GDS test machine

6 Frequency shaking test

10~30~55Hz, swing 0.35m, 1 times/min,

X, Y, Z each for 15 min (total 45 min)

IF-50 frequency conversion machine

7 Package shaking test

10~30~55Hz, swing 0.75m, 1 times/min,

X, Y, Z each for 15 min (total 45 min)

IF-50 frequency

conversion machine

Wear: In standard condition, normal temperature, air pressure, standard power and video signal, the continuous work time is $\geq 1000\text{h}$

Reliability (MTBF): $\text{MTBF} \geq 1000\text{h}$

Security:

(a) GRT OPERATES WITH LOW DC AND PROTECTION. When TO AVOID CIRCUIT MALFUNCTION (i.e. ELECTROLYSIS CAPACITANCE SHORT, FBT BURNED), the ELECTRIC

SHOCK AND FIRE BURNING NOT HAPPEN.

(b) Should have the corresponding method to avoid high-voltage leak out.

(c) When operate GRT correctly, there should not be shocked by electricity.

10 PRODUCT LABEL

If the module is CCIR system, the label is CCIR

If the module is EIA system, the label is EIA

PACKING, SHIPPING AND STORAGE

PACKING INSTRUCTIONS

DIMENTION: 570(L) X 28(W) X 290(H) mm

GROSS WEIGHT: 13.50Kg

QUANTITY: 20 PCS/CARTON

Cables: 4P, 6P cables

PROFILE AND INSTALLMENT SIZE FOR 4" FLAT CRT MODULES



