Application

This specification is applied to the 4.3 inch supported TFT-LCD module With Transparent Touch Panel, and can display true 16.7M colors (8 bit/ color). The module is designed for PMP, GPS, DMB, other electronic products which require flat panel display of digital signal interface.

Features

- WQVGA (480×272 pixels) resolution.
- 24 bit parallel RGB.

General Specifications

Item	Specifications	Unit
Screen Size	4.3 (Diagonal)	inch
Display Format	480RGB(H)×272(V)	dot
Active Area	95.04(H)×53.856(V)	mm
PIXEL Pitch	0.198(H)×0.198(V)	mm
Pixel Configuration	RGB Vertical Stripe	-
Display Mode	TN Type Transmissive Mode Normally White	-
Surface Treatment	Anti-Glare	-
Viewing Direction	6 O'clock (The Gray Inversion will appear at this direction)	-
Outline Dimension	105.5(W)×67.2(H)×3.1(D)	mm
Weight	53	g

Electrical Characteristics
TFT-LCD Module

(Ta=25±2°C)

Item	Symbol	Value			Unit	Note
		Min.	Typ.	Max.		
Analog Power Supply Voltage	AVDD	4.8	5.0	5.2	V	-
Digital Power Supply Voltage	DVDD	2.3	2.5	3.6	V	-
Input High Threshold Voltage	VIH	0.7DVDD	-	DVDD	V	-
Input Low Threshold Voltage	VIL	0	-	0.3 DVDD	V	-
Vsync Frequency	F_V	-	59.94	-	Hz	-
Hsync Frequency	FH	-	17.14	-	KHz	
Dot Clock	DCLK	-	9.0	15.0	MHz	-

(VSS = 0V)

Parameter	SYMBOL	Condition	Min	Typ	Max	Unit	Remarks
Analog Current	IAVDD	AVDD = 5V	-	17.4	27	mA	(1)
Digital Current	IDVDD	DVDD=2.5V	-	3.2	6	mA	(1)
Total Power Consumption	PC	-	-	95	150	mW	(1)

Note (1) The specified power consumption is under the conditions at DVDD = 2.5V, AVDD = 5.0V,FV=60Hz, DCLK=9.0 MHz, whereas a power dissipation check Pattern below is displayed.

Black Pattern / 0 Gray



Active Area

Input / Output Terminals Pin Assignment

TFT-LCD Module

(Reference Connector :

Hirose Electric CO., LTD. Product No.: FH12A-40S-0.5SH(55) Top contact type)

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	VSS	Ground	21	B0	Blue data(LSB)
2	VSS	Ground	22	B1	Blue data
3	DVDD	POWER SUPPLY(+2.5V)	23	B2	Blue data
4	DVDD	POWER SUPPLY(+2.5V)	24	B3	Blue data
5	R0	Red data(LSB)	25	B4	Blue data
6	R1	Red data	26	B5	Blue data
7	R2	Red data	27	B6	Blue data
8	R3	Red data	28	B7	Blue data(MSB)
9	R4	Red data	29	VSS	Ground
10	R5	Red data	30	PCLK	Pixel clock
11	R6	Red data	31	DISP	Display ON/OFF Signal
12	R7	Red data(MSB)	32	HSYNC	Horizontal Sync input with negative polarity
13	G0	Green data(LSB)	33	VSYNC	Vertical Sync input with negative polarity
14	G1	Green data	34	NC	NC
15	G2	Green data	35	AVDD	Power supply(+5V)
16	G3	Green data	36	AVDD	Power supply(+5V)
17	G4	Green data	37	NC	NC
18	G5	Green data	38	NC	NC
19	G6	Green data	39	NC	NC
20	G7	Green data(MSB)	40	NC	NC

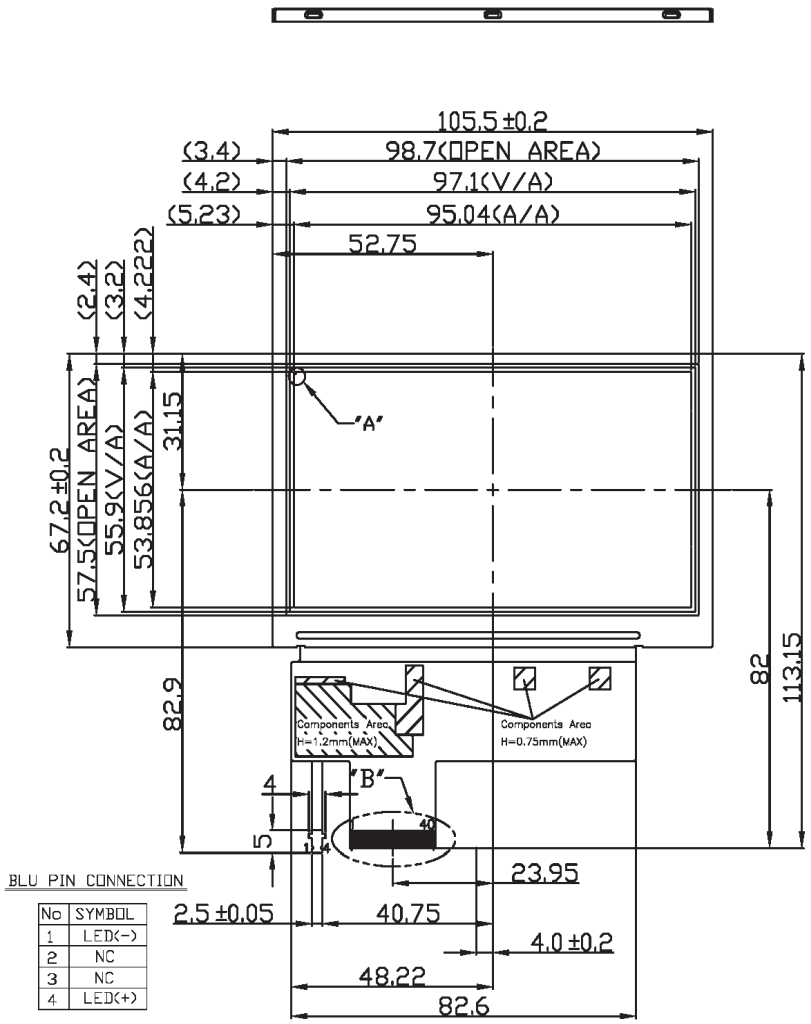
Backlight

(Reference Connector :

Kyocera Elco Corporation Product No. : 6298 Bottom contact type)

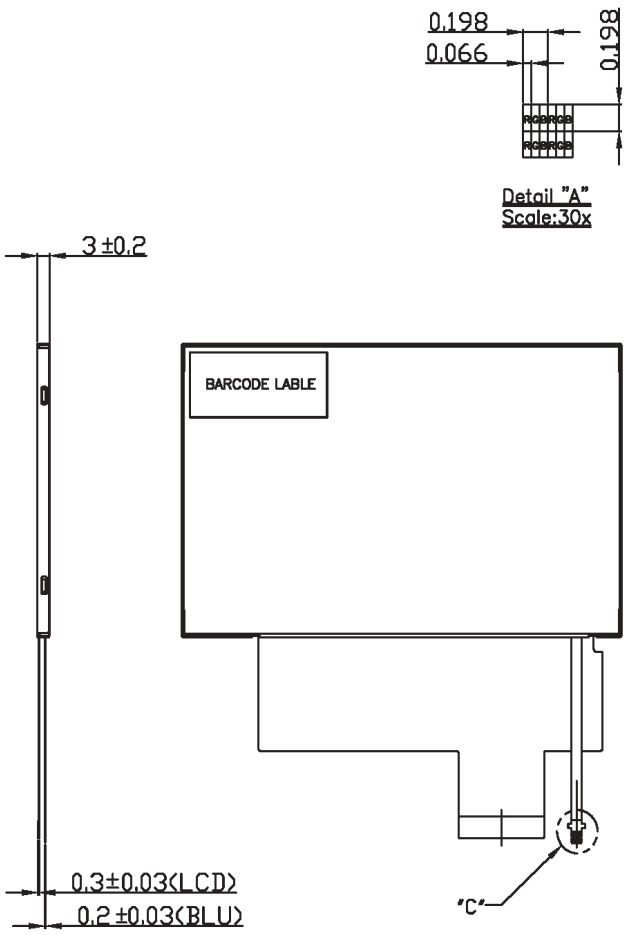
Terminnal No.	Signal	Functions
1	VLED-	LED Power Source Input terminal (Cathode side)
2	NC	No Connection
3	NC	No Connection
4	VLED+	LED Power Source Input terminal (Anode side)

Outline Drawing

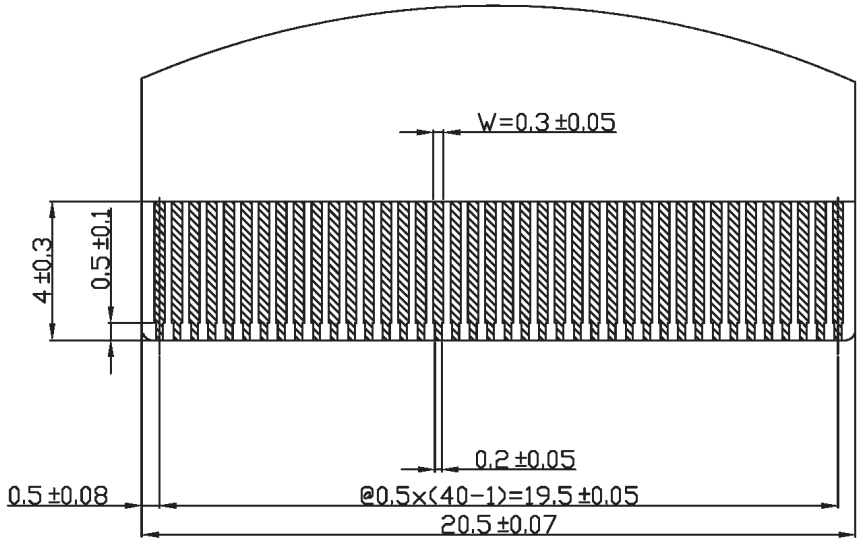


BLU PIN CONNECTION

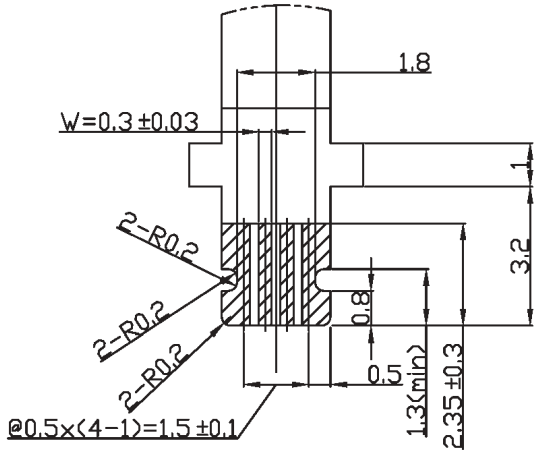
No	SYMBOL
1	LED(-)
2	NC
3	NC
4	LED(+)



first FC components



Detail "B"
Scale: 8x



Detail "C"
Scale:10x

first FC components