



**Pin Connections**

Pin	Symbol	I/O	Function
1	GND	0V	Power ground
2	DOTCLK	H/L	Pixel clock
3	HSYNC	H/L	Horizontal sync signal
4	VSYNC	H/L	Vertical sync signal
5	GND	0V	Power ground
6~11	R0~R5	H/L	Red data
12	GND	0V	Power ground
13~18	G0~G5	H/L	Green data
19	GND	0V	Power ground
20~25	B0~B5	H/L	Blue data
26	GND	0V	Power ground
27	ENABLE	H/L	Display enable pin
28~29	VDD	+3.3V	Power supply voltage
30	LEDC	H/L	LED Backlight control : H: OFF L: ON
31~32	NC	-	No connect
33~34	VCC	+5.0V	Power supply voltage
35~39	NC	-	No connect
40	GND	0V	Power ground

**Basic Specifications**

Item	Specifications
Size	3.5 inch
Resolution	320×3(RGB)×240
Color depth	262K
Viewing direction	6 o'clock

Operation temperature	-20 °C ~70 °C
Storage temperature	-30 °C ~ 80 °C
Driver IC	HX8238
Interface type	18-bits parallel RGB interface

## DC Electrical Characteristics&Backlight Driving Conditions

Item	Symbol	Min.	Typ.	Max.	Unit
Power supply	V <sub>DD</sub>	2.5	3.3	3.6	V
Supply current	I <sub>DD</sub>	-	-	-	mA
Input signal voltage	V <sub>IH</sub>	0.8 V <sub>DD</sub>	-	V <sub>DD</sub>	V
	V <sub>IL</sub>	0	-	0.2 V <sub>DD</sub>	V
Output signal voltage	V <sub>OH</sub>	0.8 V <sub>DD</sub>	-	V <sub>DD</sub>	V
	V <sub>OL</sub>	0	-	0.2 V <sub>DD</sub>	V
Power supply for LED backlight	V <sub>F</sub>	-	19.2	-	V
Current for LED backlight	I <sub>F</sub>	-	20	-	mA
Operating life time for LED backlight	Ta=25°C and I <sub>F</sub> =20mA	-	20000	-	Hrs

## Optical Specifications

Item		Symbol	Condition	Min.	Typ.	Max.	Unit
View angles	VERT	θ <sub>T</sub>	CR ≥ 10 (Note)	50	60	-	Degree
		θ <sub>B</sub>		60	70	-	
	HOR	θ <sub>L</sub>		60	70	-	
		θ <sub>R</sub>		60	70	-	
Contrast ratio		CR	θ=0°	200	350	-	-
Chromaticity	White	X	Backlight is on	0.25	0.30	0.35	
		Y		0.25	0.30	0.35	
Luminance		L	Ta=25°C and I <sub>F</sub> =20mA	-	300	-	cd/m <sup>2</sup>

Note: T:Top 12 o'clock; B:Bottom 6 o'clock; L:Left 9 o'clock; R:Right 3 o'clock