



**Pin Connections**

Pin	Symbol	I/O	Function	Pin	Symbol	I/O	Function
1~2	A	P	LED anode	37	DCLK	H/L	Clock for input data
3~4	K	P	LED cathode	38	VSS	P	Power ground
5	VSS	P	Power ground	39	L/R	H/L	Source left or right sequence control
6	VCOM	P	Common voltage	40	U/D	H/L	Gate up to down scan control
7	DVDD	P	Power supply for digital circuits	41	VGH	P	Power supply for Gate on output
8	MODE	H/L	DE/SYNC mode select.	42	VGL	P	Power supply for Gate off output
9	DE	H/L	Data input enable	43	AVDD	P	Power supply for Analog circuits
10	VSYNC	H/L	Vertical sync input	44	/REST	H/L	Reset signal,active"L"
11	HSYNC	H/L	Horizontal sync input	45	NC	-	Not connection
12~19	B7~B0	H/L	Blue data bus	46	VCOM	P	Common voltage
20~27	G7~G0	H/L	Green data bus	47	DITHB	H/L	Dithering function enable control
28~35	R7~R0	H/L	Red data bus	48	VSS	P	Power ground
36	VSS	P	Power ground	49~50	NC	-	Not connection

## Basic Specifications

Item	Specifications
Size	7 inch
Resolution	800×3(RGB)×480
Color depth	16M
Viewing direction	12 o'clock
Operation temperature	-20 °C ~70 °C
Storage temperature	-30 °C ~ 80 °C
Interface type	RGB interface

## DC Electrical Characteristics&Backlight Driving Conditions

Item	Symbol	Min.	Typ.	Max.	Unit
Power supply voltage	DVDD	3.0	3.3	3.6	V
	AVDD	10.2	10.4	10.6	V
	VGH	15.3	16.0	16.7	V
	VGL	-7.7	-7.0	-6.3	V
Input signal voltage	VCOM	3.6	3.8	4.0	mA
Input logic high voltage	V <sub>IH</sub>	0.7 DVDD	-	DVDD	V
Input logic low voltage	V <sub>IL</sub>	0	-	0.3 DVDD	V
Power supply for LED backlight	V <sub>F</sub>	-	9.6	-	V
Current for LED backlight	I <sub>F</sub>	-	160	-	mA
Operating life time for LED backlight	Ta=25°C and I <sub>F</sub> =160mA	-	20000	-	Hrs

## Optical Specifications

Item	Symbol	Condition	Min.	Typ.	Max.	Unit	
View angles	VERT	CR ≥ 10 (Note)	θ <sub>T</sub>	60	70	-	Degree
			θ <sub>B</sub>	50	60	-	
	HOR		θ <sub>L</sub>	60	70	-	
			θ <sub>R</sub>	60	70	-	
Contrast ratio	CR	θ=0°	400	500	-	-	
Chromaticity	White	Backlight is on	X	0.25	0.30	0.35	
			Y	0.25	0.30	0.35	
Luminance	L	Ta=25°C and I <sub>F</sub> =160mA	-	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