



**Features:**

- Resolution: 160S\*240C Dots
- Duty ratio: 1/240
- LCD option: FSTN
- Backlight option(H2/H1mm): EL(-/3.8)
- Touch panel built-in

Pin Assignment			
LCD Module		LCD Module	
Pin No.	Symbol	Pin No.	Symbol
1	V4	19	GND
2	V1	20	VEL B
3	V0	21	GND
4	VDD	22	VEL A
5	FRM		
6	GND	Touch panel	
7	LOAD	Pin No.	Symbol
8	GND	1	YU
9	M	2	XL
10	D/OFF	3	YD
11	CP	4	XR
12	V3		
13	V2		
14	DB3		
15	DB2		
16	DB1		
17	DB0		
18	GND		

Absolute Maximum Rating									
Item	Symbol	Condition	Min.	Max.	Units				
Supply for logic voltage	V <sub>dd</sub> -V <sub>ss</sub>	25°C	-0.3	7.0	V				
LCD driving supply voltage	V <sub>ee</sub> -V <sub>ss</sub>	25°C	-0.3	30.0	V				
Input Voltage	V <sub>IN</sub>	25°C	-0.3	V <sub>dd</sub> +0.3	V				
Electrical Characteristics									
Item	Symbol	Condition	Min.	Typical	Max.	Units			
Power supply voltage	V <sub>dd</sub> -V <sub>ss</sub>	25°C	2.7	5.0	5.5	V			
LCD operation voltage	VOP	Top	N	W	N	W	V		
		-20°C	-	20.2	-	20.5	-	20.8	V
		0°C	-	-	-	-	-	V	
		25°C	-	18.2	-	18.5	-	18.8	V
		50°C	-	-	-	-	-	V	
		70°C	-	16.2	-	16.5	-	16.8	V
LCM current consumption (No B/L)	I <sub>dd</sub>	V <sub>dd</sub> =5V	-	0.3	-	mA			
	I <sub>ee</sub>	V <sub>ee</sub> =18.5V	-	3.0	-	mA			
Backlight current consumption	EL	VEL=5V	-	40.0	-	mA			