

### GENERAL SPECIFICATION

Item	Content
Number of Character	20x2
Module Size	116.0(W)x37.0(H)x10.0/14.5(D)mm Max
Viewing Area	82.2(W)x18.2(H)mm
Character Size	3.20(W)x5.55(H)mm
Dot Size/Dot Pitch	0.60(W)x0.65(H)mm/0.65(W)x0.70(H)mm
Backlight	Without/EL/LED
Options	Gray STN/Yellow STN/Extended Temperature/Bottom/Top Viewing

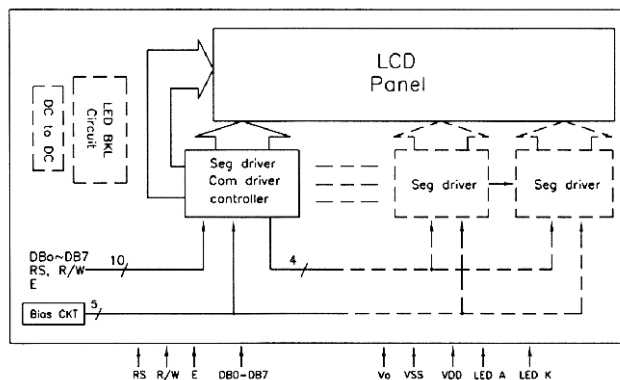
### INTERFACE PIN ASSIGNMENT

Pin No.	Pin Out	Function Description
1	V <sub>SS</sub>	Ground
2	V <sub>DD</sub>	Logic Circuit Power Supply
3	V <sub>O</sub>	Power Supply for LCD Panel
4	RS	Data/Instruction Register Select
5	R/W	Read/Write Select
6	E	Enable Signal
7-14	DB0-DB7	3-State I/O Data Bus
15	BKL1	Power Supply for Backlight. 100V/400Hz AC for EL, 4.2V or 120-180mA DC for LED backlight. Don't care if no backlight
16	BKL2	

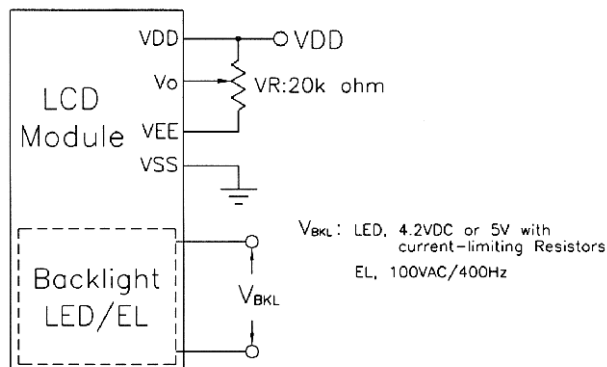
### ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min.	Typ.	Max.	Unit	Note
Power Supply for Logic	V <sub>DD</sub> -V <sub>SS</sub>	-	2.7	4.5	5.5	Volt	-
Input Voltage	V <sub>IL</sub>	L level	V <sub>SS</sub>	0.2V <sub>DD</sub>	-	Volt	-
	V <sub>IH</sub>	H level	0.8V <sub>DD</sub>	V <sub>DD</sub>	-	Volt	
LCM Recommend LCD Module Driving Voltage	V <sub>DD</sub> =5V V <sub>DD</sub> -V <sub>O</sub> =4.0V	Ta=0°C	-	-	-	Volt	-
		Ta=25°C	3.8	4.0	4.4		
		Ta=50°C	-	-	-		
Power Supply Current for LCM	I <sub>DD</sub> (B/L OFF)	V <sub>DD</sub> =5V V <sub>DD</sub> -V <sub>O</sub> =4.0V Ta=25°C	-	1.5	2.0	mA	-
	I <sub>LED</sub>	-	-	130	160		

### BLOCK DIAGRAM



### POWER SUPPLY



### MECHANICAL

