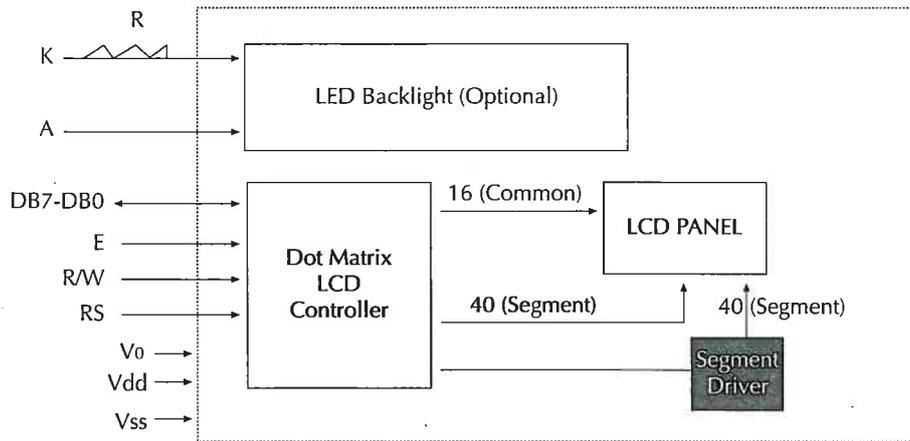


# CCM-1620 SERIES

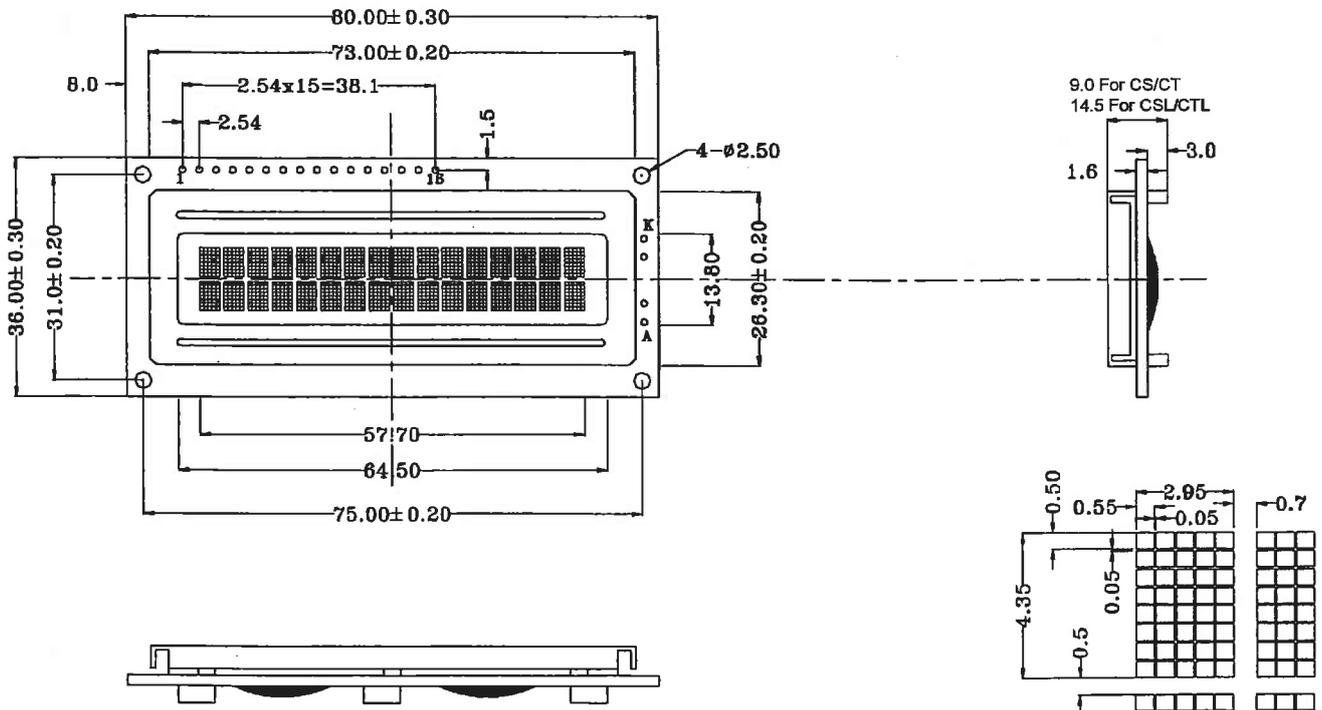
## GENERAL INFORMATION

Item	Description	Unit
Module Dimension	80.0(L) x 36.0(W) x 9.0/14.5(H)	mm
Viewing Area	64.5(L) x 13.8(W)	mm
Character Size	2.95(L) x 4.35(W)	mm
Dot Size	0.55(L) x 0.50(W)	mm
Dot Pitch	0.60(L) x 0.55(W)	mm
Duty Cycle	1/16	

## SYSTEM BLOCK DIAGRAM



## ASSEMBLY DIAGRAM



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Vss	Vdd	V0	RS	R/W	E	DB0	DB1	DB2	DB3	DB4	DB5	DB6	DB7	A	K

## ABSOLUTE MAXIMUM

Item	Symbol	Min.	Max.	Unit
Power Supply for Logic	Vdd	-0.3	+7.0	V
Power Supply for LCD Drive	Vlcd	Vdd-11.5	Vdd+0.3	V
Input Voltage	Vi	-0.3	Vdd+0.3	V
Operating Temperature	Ta	0	+50	°C
Storage Temperature	Tstg	-10	+60	°C

## ELECTRICAL CHARACTERISTICS

(Ta=25°C; Vdd=5.0V±5%, otherwise specified)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Power Supply for Logic	Vdd	--	4.5	--	5.5	V
Operating Voltage for LCD	Vdd-V0	--	--	5.0	--	V
Input "high" voltage	Vih	--	2.2	--	Vdd	V
Input "low" voltage	Vil	--	-0.3	--	0.6	V
Output "high" voltage	Voh	-loh=0.2mA	2.4	--	--	V
Output "low" voltage	Vol	lo1=1.2mA	--	--	0.4	V

## PIN ASSIGNMENT

No.	Symbol	Level	Function	
1	Vss	--	0V	Power Supply
2	Vdd	--	+5V	
3	V0	--	for LCD	
4	RS	H/L	Register Select: H--Data, L--Instruction	
5	R/W	H/L	H--Read	L--Write
6	E	H,H-L	Enable Signal	
7	DB0	H/L	Data bus used in 8 bit transfer	
8	DB1	H/L		
9	DB2	H/L		
10	DB3	H/L		
11	DB4	H/L	Data bus for both 4 and 8 bit transfer	
12	DB5	H/L		
13	DB6	H/L		
14	DB7	H/L		
15	A	--	LED Backlight (+)	
16	K	--	LED Backlight (-)	