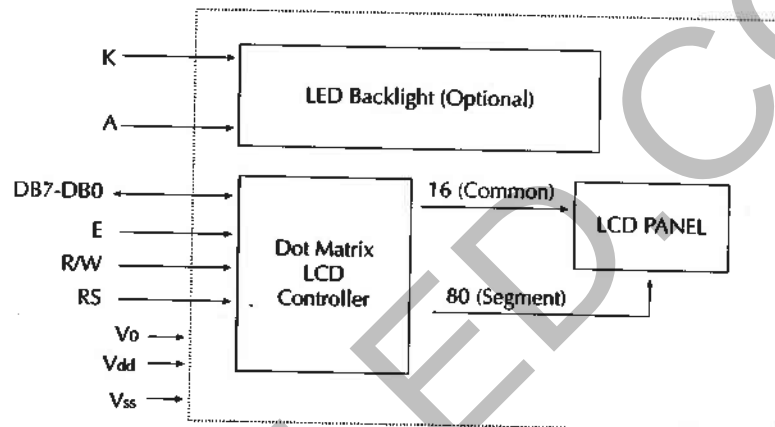


CCM-1623 SERIES

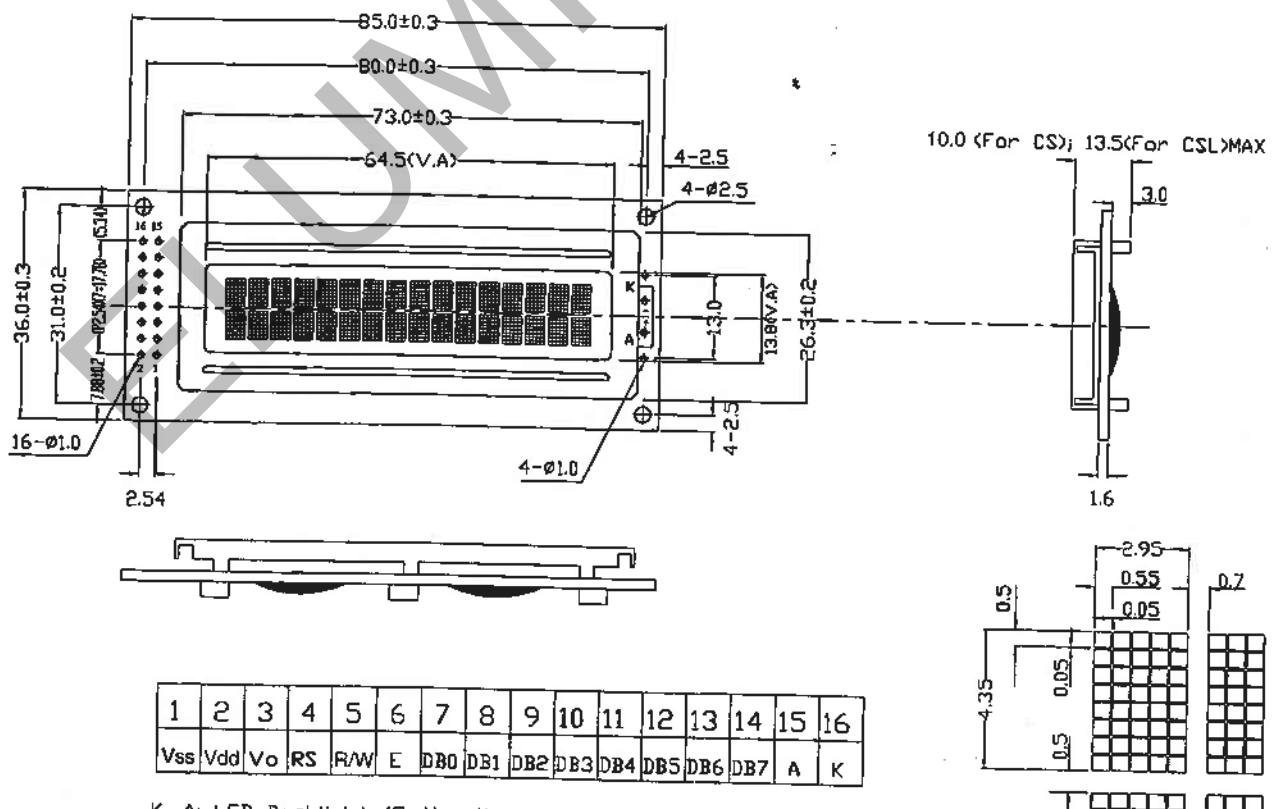
General Information

Item	Description	Unit
Module Dimension	85.0(L) x 36.0(W) x 10.0/13.5(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



ABSOLUTE MAXIMUM

Item	Symbol	Min.	Max.	Unit
Power Supply for Logic	V _{dd}	-0.3	+7.0	V
Power Supply for LCD Drive	V _{lcd}	V _{dd} -13.5	V _{dd} +0.3	V
Input Voltage	V _i	-0.3	V _{dd} +0.3	V
Operating Temperature	T _a	0	+50	°C
Storage Temperature	T _{stg}	-20	+60	°C

ELECTRICAL CHARACTERISTICS

(T_a=25°C; V_{dd}=5.0V±5%, V_{ss}=0V; otherwise specified)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Power Supply for Logic	V _{dd}	--	4.5	--	5.5	V
Operating Voltage for LCD	V _{dd} -V _{ss}	--	--	5.0	--	V
Input "high" voltage	V _{ih1}	--	2.2	--	V _{dd}	V
Input "low" voltage	V _{il1}	--	-0.3	--	0.6	V
Input "high" voltage	V _{ih2}	--	V _{dd} -0.1	--	V _{dd}	V
Input "low" voltage	V _{il2}	--	-0.2	--	1.0	V
Output "high" voltage	V _{oh1}	-I _{oh} =0.205mA	2.4	--	--	V
Output "low" voltage	V _{ol1}	I _{ol} =1.2mA	--	--	0.4	V
Power supply current	I _{dd}	V _{dd} =5.0V f _{osc} =270kHz	--	0.35	0.6	mA

PIN ASSIGNMENT

No.	Symbol	Level	Function	
1	Vss	--	0V	Power Supply
2	Vdd	--	+5V	
3	Vo	--	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 (-)	