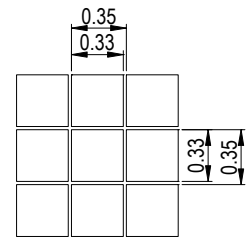
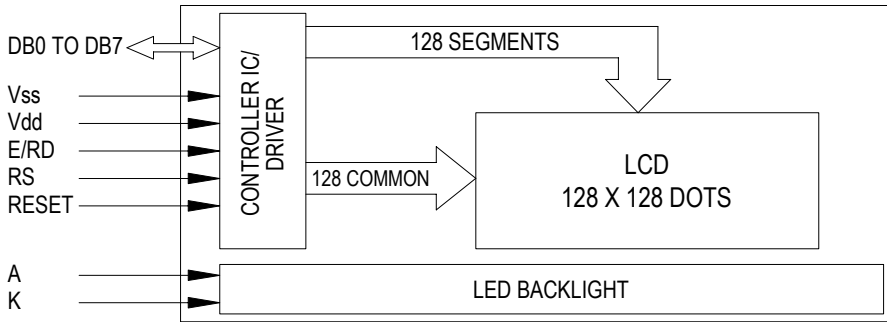
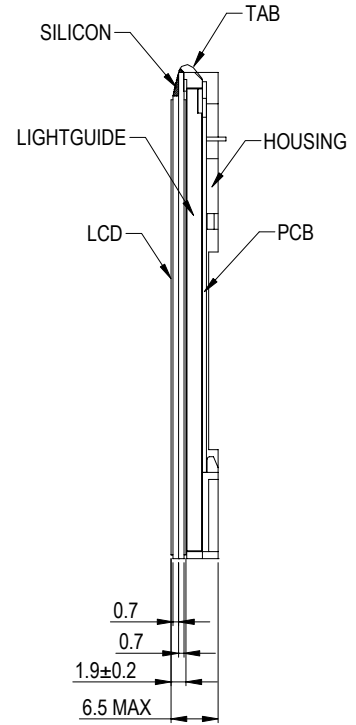
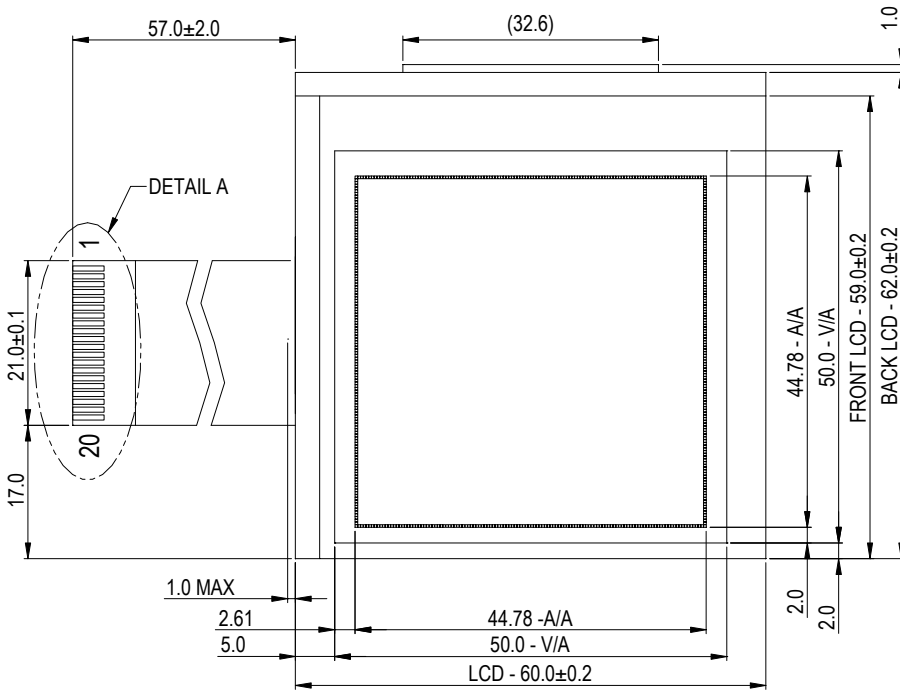




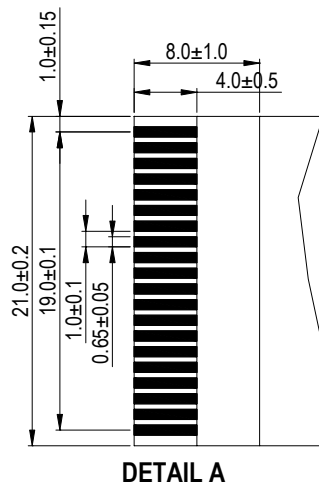
STANDARD GRAPHICS MODULES

G1212X02.....OUTLINE DIMENSION AND ELECTRICAL SPECIFICATION



The tolerance unless classified ±0.3 mm

PIN ASSIGNMENT		
Pin No.	Symbol	Function
1	DB0	Data Bus Line
2	DB1	Data Bus Line
3	Vss	Ground Terminal
4	DB2	Data Bus Line
5	DB3	Data Bus Line
6	Vss	Ground Terminal
7	DB4	Data Bus Line
8	DB5	Data Bus Line
9	Vss	Ground Terminal
10	DB6	Data Bus Line
11	DB7	Data Bus Line
12	Vss	Ground Terminal
13	E/RD	Enable/Read Signal
14	RS	Register Select Signal
15	RESET	Reset Signal
16	Vdd	Supply Signal
17	BL+	Led Backlight Power Supply
18	BL+	Led Backlight Power Supply
19	BL-	Led Backlight Ground
20	BL-	Led Backlight Ground



ABSOLUTE MAXIMUM RATING						
Item	Symbol	Conditions	Min.	Max.	Unit	
Power Supply Voltage	Vdd-Vss	-	-0.3	7.0	V	
Input Voltage	Vin	-	Vss	Vdd	V	
NORMAL	OPERATING TEMPERATURE	Topr	Normal	0	+50	°C
	STORAGE TEMPERATURE	Tstg	Normal	-20	+70	°C
WIDE	OPERATING TEMPERATURE	Topr	Normal	-20	+70	°C
	STORAGE TEMPERATURE	Tstg	Normal	-30	+80	°C

ELECTRICAL CHARACTERISTIC (Vdd = + 5v, Ta = 25°C)						
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Logic Supply Voltage	Vdd	-	2.75	-	5.5	V
"H" Input Voltage	V _{ih}	-	0.7V _{dd}	-	Vdd	V
"L" Input Voltage	V _{il}	-	-0.3	-	0.6	V
"H" Output Voltage	V _{oh}	-	0.75V _{dd}	-	-	V
"L" Output Voltage	V _{ol}	-	-	-	0.2V _{dd}	V
Module Supply Current	I _{dd}	-	-	0.5	1.0	mA
LCD Driving Voltage	V _{cs}	V _o -V _{ss}	12.6	13.2	13.8	V

BACKLIGHT OPTION						
LED COLOR	OPTION	CONDITION	FORWARD CURRENT (mA)			
			MIN	TYP	MAX	
YELLOW GREEN	NO	-	-	-	-	
WHITE	YES	V _{led} = 5.0V R _{led} = 33.3 ohm	-	40	-	
BLUE	YES	V _{led} = 5.0V R _{led} = 33.3 ohm	-	40	-	
AMBER	NO	-	-	-	-	
RED	NO	-	-	-	-	
CCFL	NO	-	-	-	-	
EL	NO	-	-	-	-	

NOTE :
1. BACKLIGHT - SIDE LED BACKLIGHT

CCT reserves the right to vary or make changes to the specifications of the module in this brochure at any time without prior notice. CCT further assumes no responsibility for its use, nor for any infringements of patents, pending applications or the rights of thirds parties as a result of its use.