

Phoenix Display International, Inc.

PRODUCT PREVIEW

122 x 32 Monochrome

TN/STN

Graphics
Liquid Crystal Display

SPECIFICATIONS

MODULE

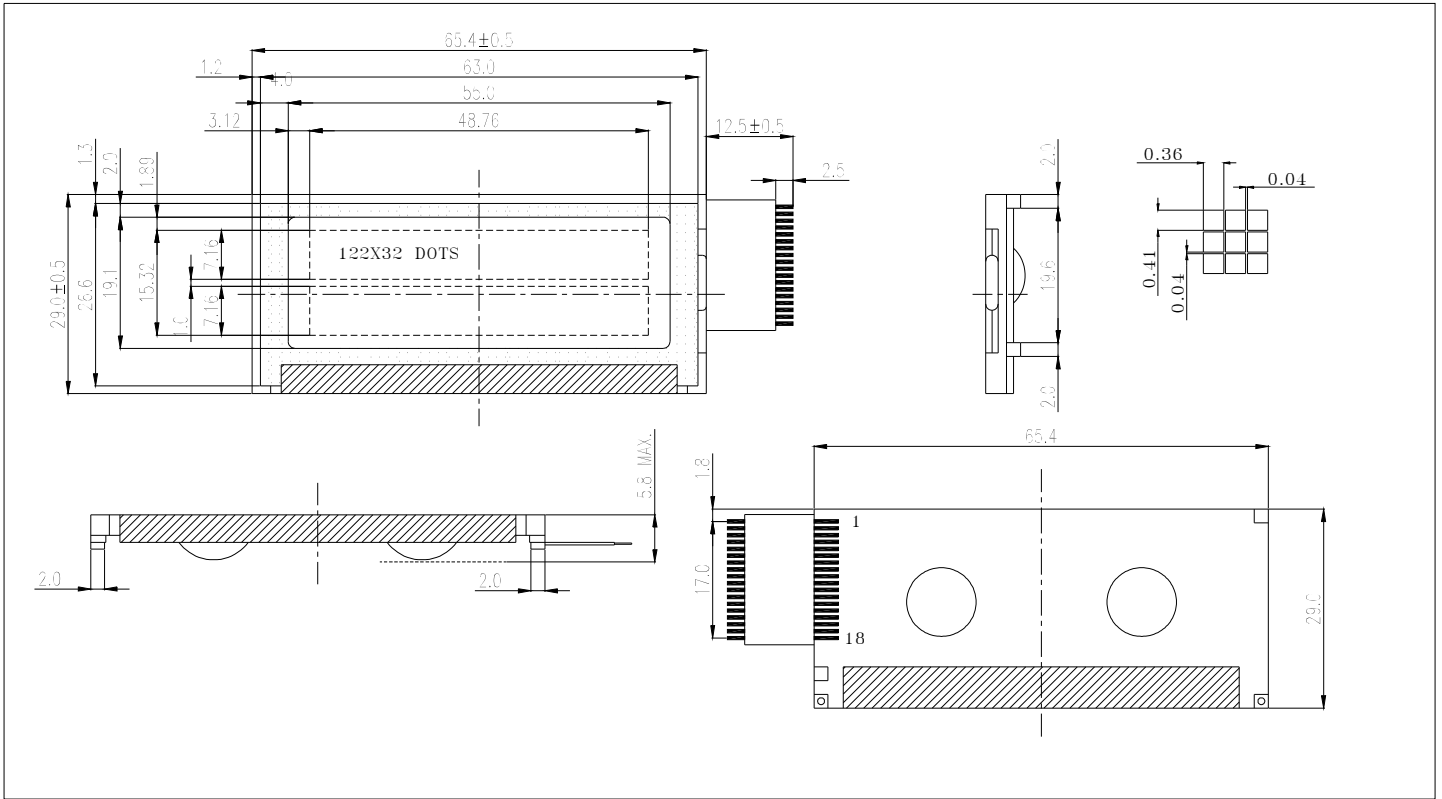
Part Number	G-1223221C-VA
Format	122 Columns by 32 Rows
Controller	SED1520
Overall Dimensions	64.0mm x 29.0mm x 5.8mm
Active Area	48.8mm x 15.3mm
Pixel Pitch	400um x 450um
Pixel Size	360um x 410um
Backlight System	LED
Driver Attach	Chip on Board (COB)
Display Type	STN, FSTN
Duty	1/32
Bias	1/5



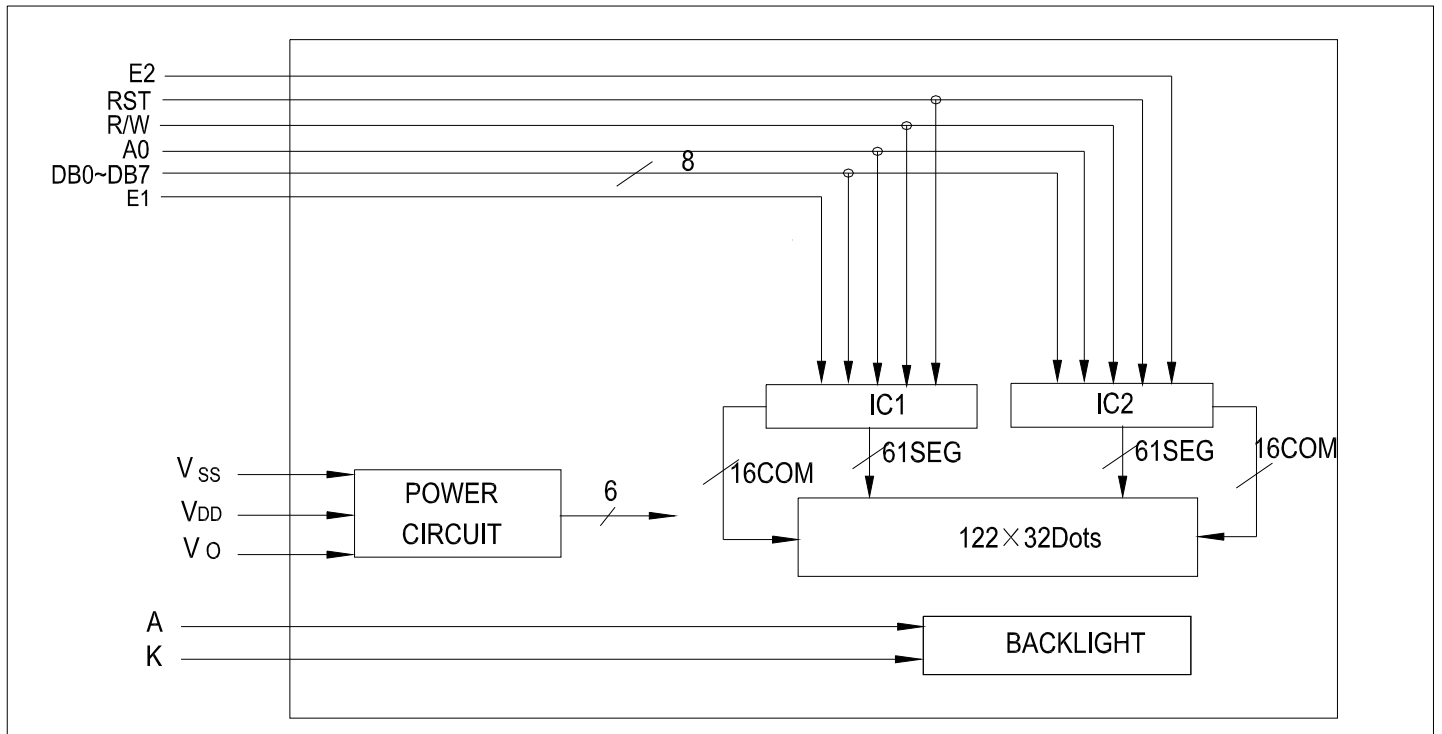
G-1223221C-VA

1/32 DUTY, 1/5 BIAS
122x32 DOTS

1.0 DIMENSIONAL DRAWING



2.0 BLOCK DIAGRAM



3.0 ELECTRICAL CHARACTERISTICS $T_a=25^\circ\text{C}$ $V_{DD}=5.0\text{V}\pm 0.25\text{V}$

Item	Symbol	Test Condition	Standard Value			Unit
			Min.	Typ.	Max.	
Power Supply Voltage	$V_{DD}-V_{SS}$	25°C	4.5	5.0	5.5	V
LCD Operation Voltage	V_{OP}		-	5.2	-	V
LCM Current Consumption	I_{DD}		-	2.0	3.0	mA
Backlight Forward Voltage	V_F		-	2.1	-	V

4.0 ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Test Condition	Standard Value		
			Min.	Max.	Unit
Supply Voltage (Logic)	$V_{DD}-V_{SS}$	25°C	-0.3	7	V
Supply Voltage (LCD)	$V_{DD}-V_O$		-0.3	13.5	V
Input Voltage	V_{IN}		-0.3	$V_{DD}+0.3$	V
Operating Temp.	T_{OPR}	-	0	50	°C
Storage Temp.	T_{STG}	-	-20	70	°C

5.0 PIN ASSIGNMENT

PIN No.	Symbol	Description
1	V_{DD}	Power supply
2	GND	Power supply(GND)
3	V_O	Operating voltage for LCD
4	RST	Reset at rising edge
5	E1	Enable signal for IC1
6	E2	Enable signal for IC2
7	R/W	Read/Write selection H:Read; L:Write
8	A0	Register selection H:Display data; L:Instruction
9~16	DB0~DB7	Data bus
17	LEDK	LED Back-light
18	LEDA	LED Back-light

Remark

1. LCD option: STN, FSTN .
2. Standard module.
3. Backlight option: LED backlight feature, other specs not available on catalog is under request.