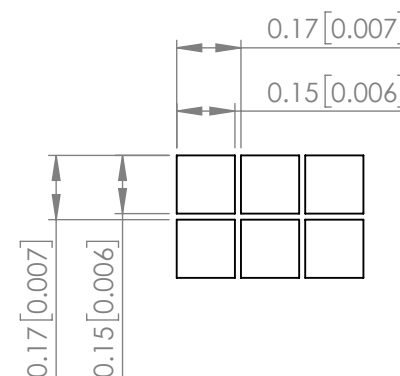
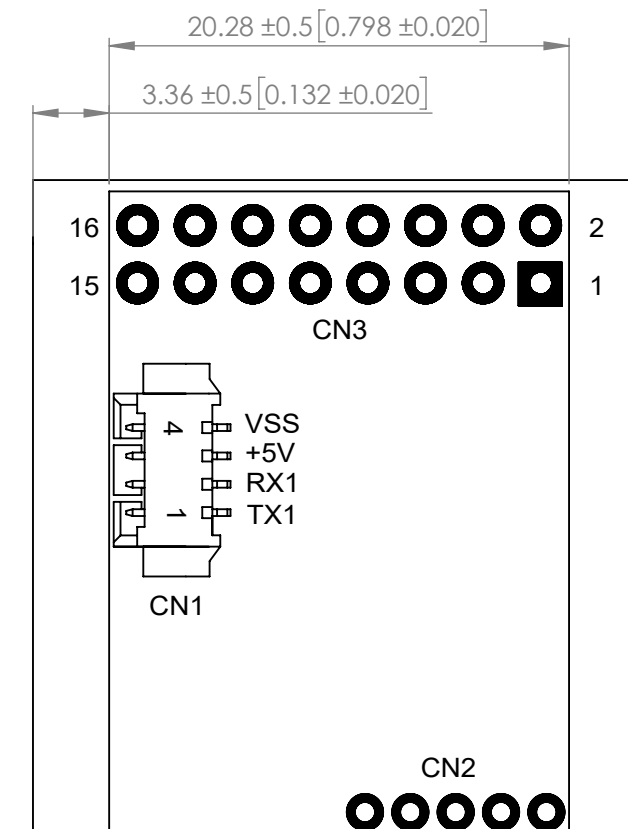
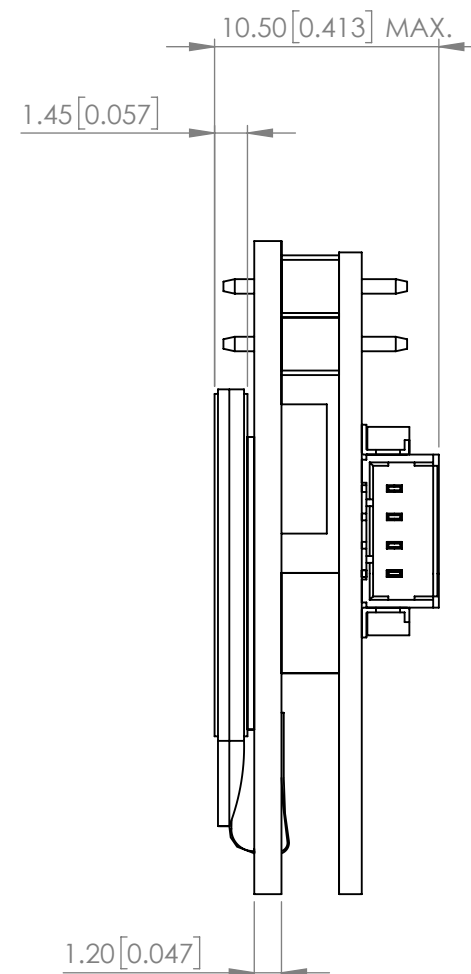
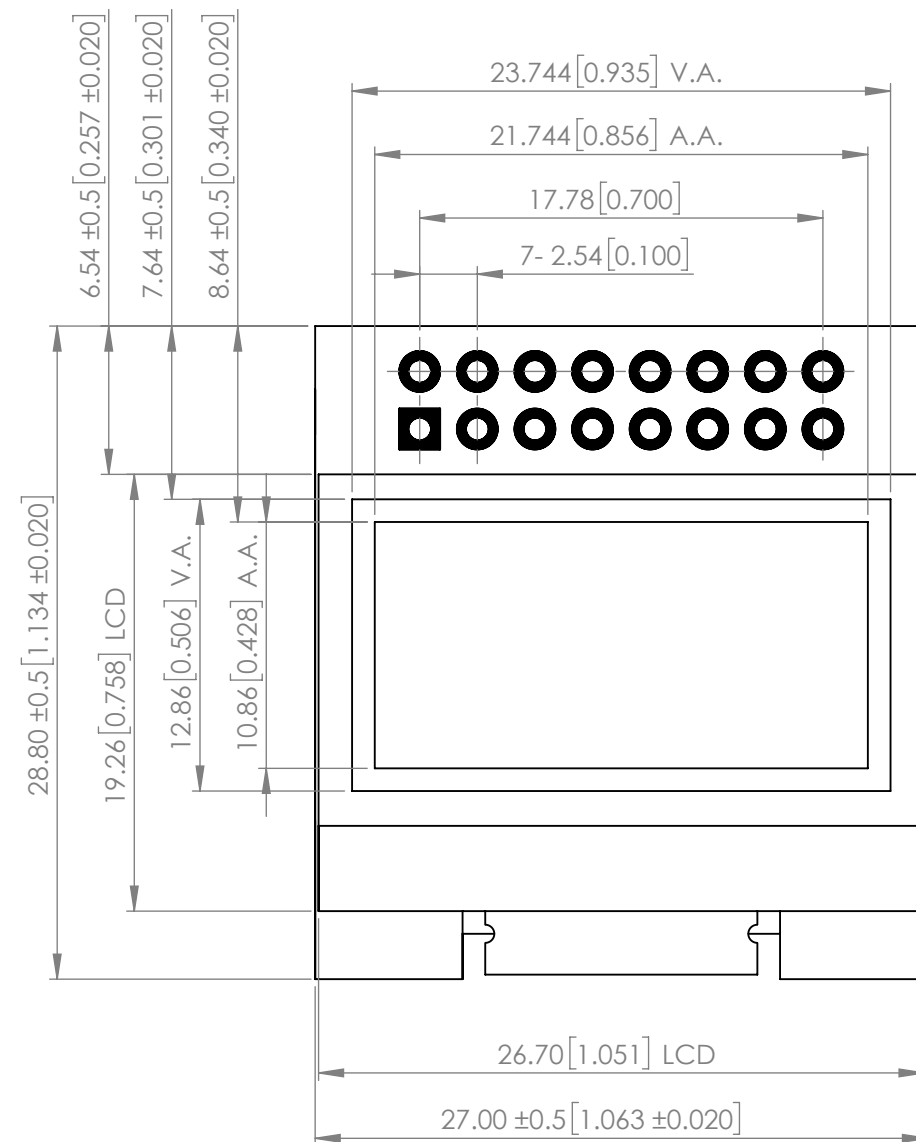




NOTE:
1. RoHS COMPLIANT.

*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN.=^{+DECIMAL PRECISION}_{-0.00} MAX.=^{+0.00}_{-DECIMAL PRECISION}



425 N. GARY AVE.
CAROL STREAM, IL 60188
PHONE : 800-278-5666
FAX : 630-315-2150
WEB : WWW.LUMEX.COM

27(L)*28.8(W)*10.4(H)mm, 0.96" 128x64 OLED ezDisplay, UART Interface.

DATE : 2017.11.03

DRAWN BY : C.C.

****THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.****

PAGE : 1 OF 6

CHKD BY : E.C.

CONFIDENTIAL INFORMATION

THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.

SCALE : NTF

APRVD BY : G.Y.

UNIT : mm [INCH]



GENERAL SPECIFICATION

ITEM	DESCRIPTION
DISPLAY MODE	PASSIVE MATRIX
DISPLAY TYPE	OLED 0.96"
NUMBER OF PIXELS	128 x 64
PIXELS PITCH	0.17 x 0.17
PIXELS SIZE	0.154 x 0.154
VIEW ANGLE	>160 DEGREE
SUPPLY VOLTAGE	5.0V
DIMENSIONS	27.0 * 28.8 * 10.5 MAX.
VIEW AREA	23.744 * 12.864
ACTIVE AREA	21.744 * 10.864

FUNCTIONAL SPECIFICATION

(1)UART CONFIGURATION:

ITEM	SETTING VALUE
BAUD RATE	115200
DATA BIT	8
STOP BIT	1
PARITY BIT	NONE
FLOW CONTROL	NONE

ABSOLUTE MAXIMUM RATING

(1) Electrical Absolute Ratings

ITEM	SYMBOL	MIN.	MAX.	UNIT
POWER SUPPLY FOR LOGIC	VDD-VSS	-0.3	5.5	VOLT
INPUT VOLTAGE	VI	-0.3	VDD	VOLT
SUPPLY VOLTAGE FOR DISPLAY	VCC	0	11.0	VOLT

Note 1: All the above voltages are on the basis of “VSS” = 0V”.

Note 2: When this module is used beyond the above absolute maximum ratings, permanent breakage of the module may occur.

(2) Environmental Absolute Maximum Ratings

ITEM	WIDE TEMPERATURE			
	OPERATING		STORAGE	
	MIN.	MAX.	MIN.	MAX.
AMBIENT TEMPERATURE	-40℃	+70℃	-40℃	+80℃

CN1 PIN ASSIGNMENT

PIN NO.	PIN OUT	LEVEL	DESCRIPTION
1	TX1	H/L	SERIAL TRANSMIT SIGNAL
2	RX1	H/L	SERIAL RECEIVE SIGNAL
3	+5V	+5V	POWER SUPPLY VOLTAGE
4	VSS	0V	POWER SUPPLY GROUND

*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN= ^{+DECIMAL PRECISION}_{-0.00} MAX.= ^{+0.00}_{-DECIMAL PRECISION}

ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
POWER SUPPLY FOR LOGIC	VDD-VSS	-	4.5	5.0	5.5	VOLT
SUPPLY VOLTAGE FOR DISPLAY	VCC	DC/DC CONVERTERS	8.5	9.0	9.5	VOLT
INPUT VOLTAGE	VIL	L LEVEL	0	-	0.2 VDD	VOLT
	VIH	H LEVEL	0.8 VDD	-	VDD	VOLT
OUTPUT VOLTAGE	VOL	L LEVEL	0	-	0.1 VDD	VOLT
	VOH	H LEVEL	0.9 VDD	-	VDD	VOLT
OPERATING CURRENT FOR OLED	IDD OPERATING	VDD=5V VCC-VSS=9.0V	33.0	38	45	mA

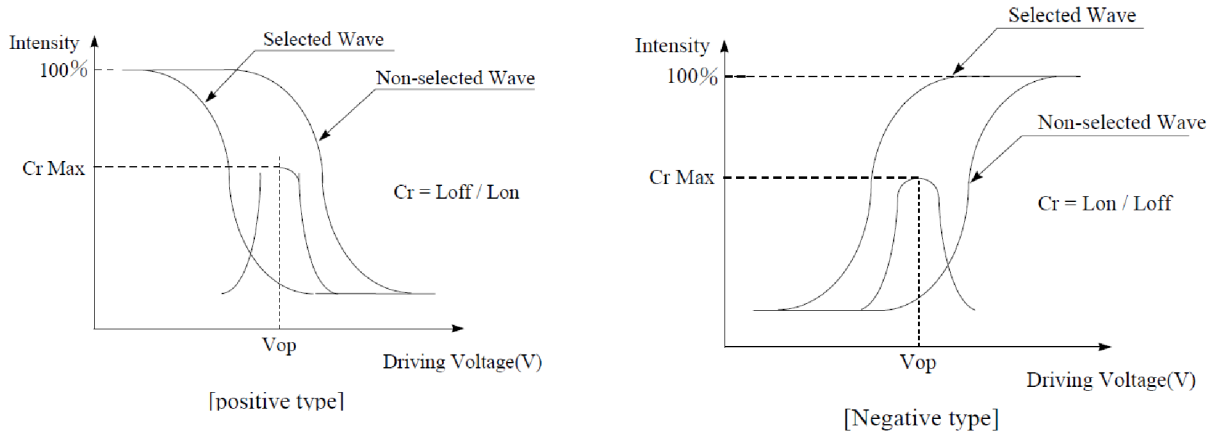
OPTICAL CHARACTERISTICS

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
VIEW ANGLE RANGE	Φf (12 O'CLOCK)	-	-	85	-	DEGREE
	Φb (12 O'CLOCK)		-	85	-	
	Φl (12 O'CLOCK)		-	85	-	
	Φr (12 O'CLOCK)		-	85	-	
RISE TIME	Tr	-	-	40	-	nS
FALL TIME	Tf		-	40	-	
FRAME FREQUENCY	Frm		-	-	-	Hz
CONTRAST	Cr		10000	-	-	
BRIGHTNESS	L	-	100	120	-	cd/m ²
PEAK EMISSION WAVELENGTH	C.I.E (WHITE)		X=0.25 Y=0.27	X=0.29 Y=0.31	X=0.33 Y=0.35	nm

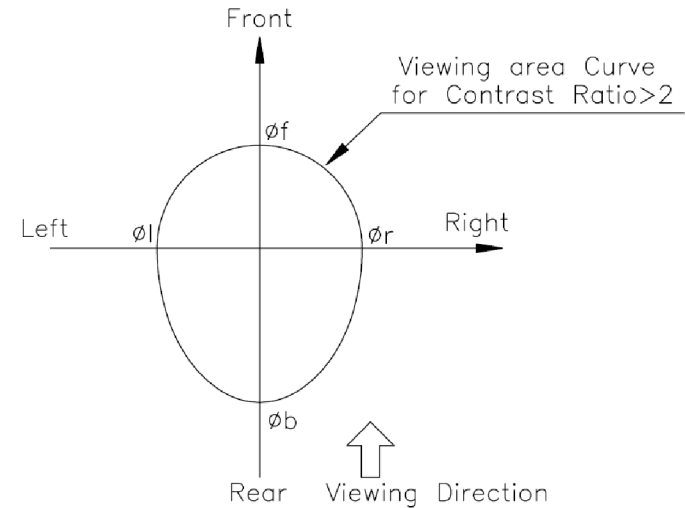
Note1: Optiocl measure taken at VDD=5.0V, Vcc=12.5V, Ta=25°C.

*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN= ^{+DECIMAL PRECISION}_{-0.00} MAX.= ^{+0.00}_{-DECIMAL PRECISION}

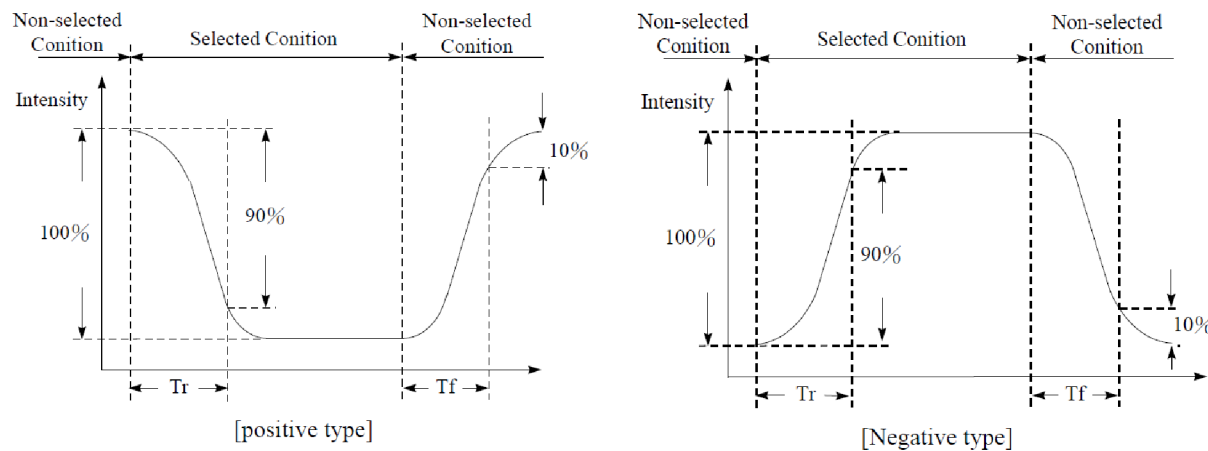
Definition of Operation Voltage (Vop)



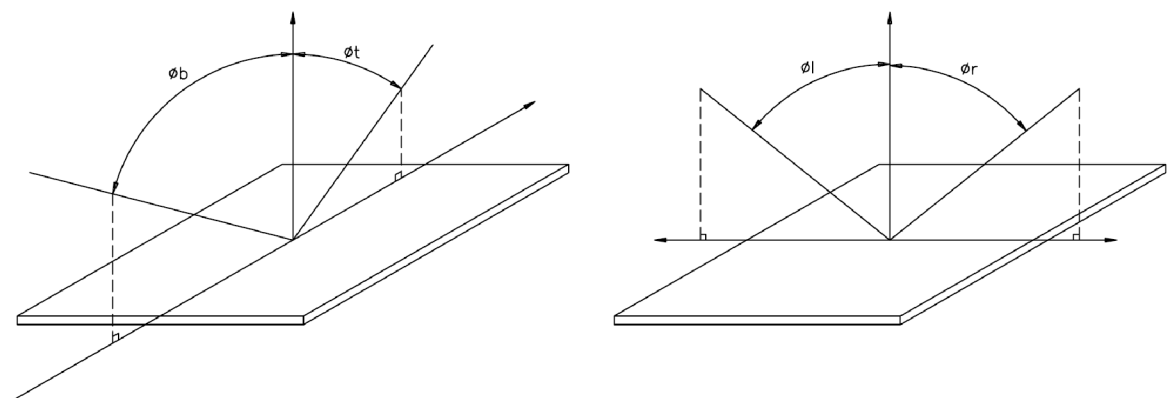
Definition of Viewing Direction



Definition of Response Time (Tr, Tf)



Definition of viewing angle



*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN= ^{+DECIMAL PRECISION}_{-0.00} MAX.= ^{+0.00}_{-DECIMAL PRECISION}



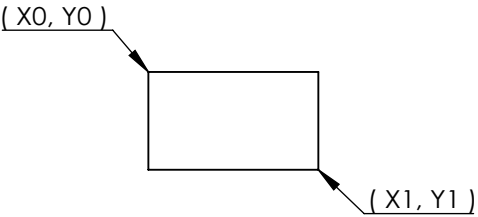
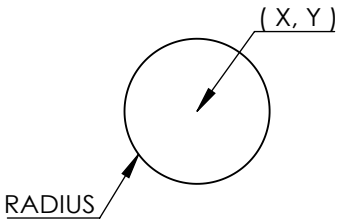
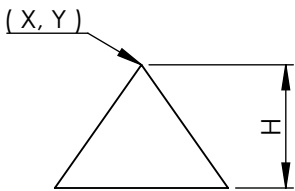
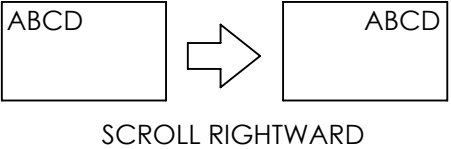
425 N. GARY AVE.
CAROL STREAM, IL 60188
PHONE : 800-278-5666
FAX : 630-315-2150
WEB : WWW.LUMEX.COM

27(L)*28.8(W)*10.4(H)mm, 0.96" 128x64 OLED ezDisplay, UART Interface.

THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.

CONFIDENTIAL INFORMATION
THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL
KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.

DATE : 2017.11.03	DRAWN BY : C.C.
PAGE : 4 OF 6	CHKD BY : E.C.
SCALE : NTF	APRVD BY : G.Y.
UNIT : mm [INCH]	Ⓢ

		PART NUMBER	LOD-H12864GP-W-UR1	REV	--
DIAGRAM	COMMAND*	EXAMPLE			
	Write a 5X7 String	at 81 =(line,column,String) at 81 =(0,0,ABCD)			
	Draw a Rectangle	at 91 =(X0 position,Y0 position,X1 position,Y1 position, 0 or 1) at 91 =(0,0,55,7,1) : '1' positive mode			
	Draw a Circle	at 94 =(X position,Y position,Radius, 0 or 1) at 94 =(48,4,3,1) : '1' positive mode			
	Draw a tip upward Triangle	at 96 =(X position,Y position,Height, 0 or 1) at 96 =(48,1,3,1) : '1' positive mode			
	Scroll the whole display rightward	at d5 =(shif time in ms) at d5 =(20)			

* Please refer to detail commands on Lumex website: www.lumex.com/ezdisplay

*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN= ^{+DECIMAL PRECISION}_{-0.00} MAX.= ^{+0.00}_{-DECIMAL PRECISION}

	425 N. GARY AVE. CAROL STREAM, IL 60188 PHONE : 800-278-5666 FAX : 630-315-2150 WEB : WWW.LUMEX.COM	27(L)*28.8(W)*10.4(H)mm, 0.96" 128x64 OLED ezDisplay, UART Interface.		DATE : 2017.11.03	DRAWN BY : C.C.
		THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.		PAGE : 5 OF 6	CHKD BY : E.C.
		CONFIDENTIAL INFORMATION		SCALE : NTF	APRVD BY : G.Y.
		THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.		UNIT : mm [INCH]	

				PART NUMBER	LOD-H12864GP-W-UR1	REV	--
ASCII code of 5X7 fonts and 8X16 fonts				ASCII code of 16X16 fonts		No. of 8X16 pattern	