



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

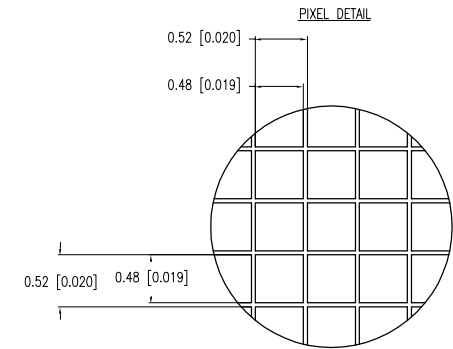
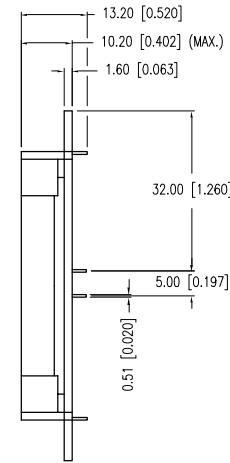
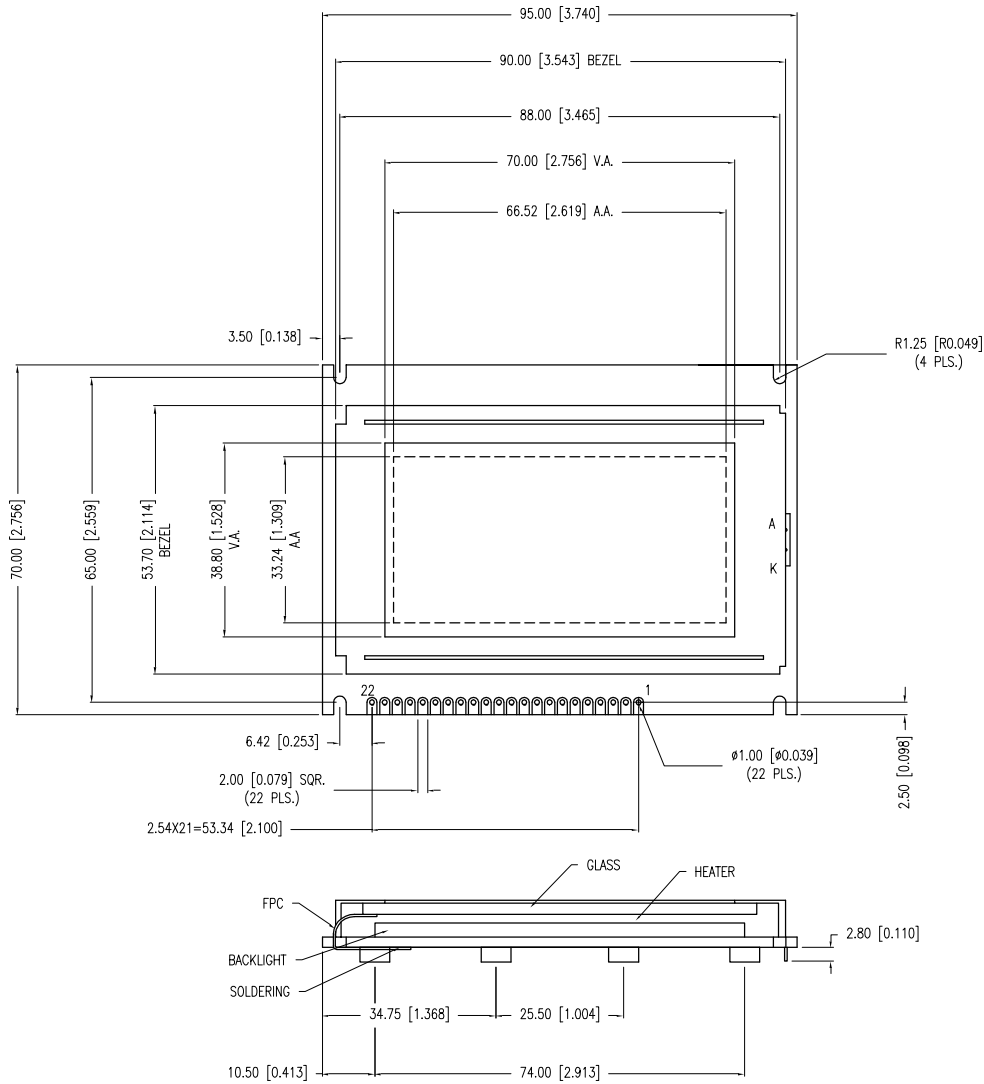
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PART NUMBER	LCR-U12864GSF-WH	REV.	A
DATE	E.C.N. NUMBER AND REVISION COMMENTS		REV.
05.20.10	E.C.N. #11642.		A



*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 _{-DECIMAL PRECISION} UNCONTROLLED DOCUMENT



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128 x 64 GRAPHIC LCD MODULE, STN GRAY, W/ HEATER, TRANSFLECTIVE, WHITE LED BACKLIGHT, 6:00 VIEW.

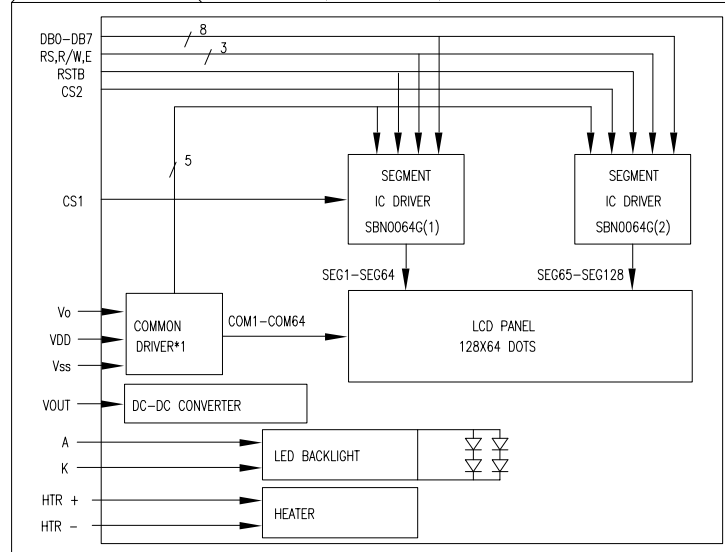
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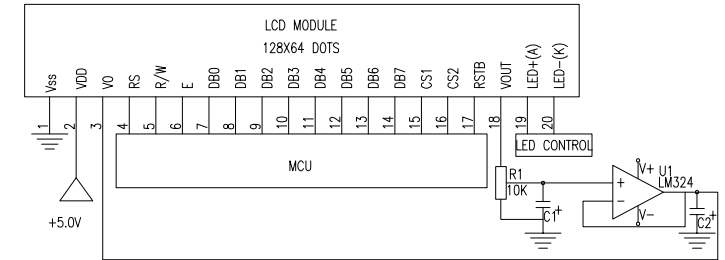
DATE:	11.24.09	DRAWN BY:	JN
PAGE:	1 OF 2	CHKD BY:	JD
SCALE:	N/A	APRVD BY:	SA
UNIT:	mm [INCH]		(R)

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	SEE PAGE 1		

BLOCK DIAGRAM 128 x 64, 1/64 DUTY, 1/9 BIAS



- NOTES:
 1. R1 IS THE CONTRAST RESISTOR.
 2. VOUT=-10.0V
 3. ADJUST R1 TO GET GOOD CONTRAST. TYP: V0 IS -7.9V.



ABSOLUTE MAXIMUM RATINGS					
ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			MIN	MAX	
SUPPLY VOLTAGE FOR LOGIC	$V_{DD}-V_{SS}$	$T_a=25^{\circ}C$	4.7	5.3	V
SUPPLY VOLTAGE FOR LCD DRIVE	$V_{DD}-V_0$	-	0	15	V
INPUT VOLTAGE	V_I	$T_a=25^{\circ}C$	V_{SS}	V_{DD}	V
OPERATING TEMPERATURE	T_{opr}	W/ HEATER	-40	+85	$^{\circ}C$
STORAGE TEMPERATURE	T_{stg}	W/ HEATER	-40	+85	$^{\circ}C$

PIN CONFIGURATION

PIN NO.	SYMBOL	FUNCTION	
1	V_{SS}	POWER SUPPLY	
2	V_{DD}		GND (0V)
3	V_0		5V
4	RS	FOR LCD DRIVE	
4	RS	REGISTER SELECT RS=0...INSTRUCTION REGISTER RS=1...DATA REGISTER	
5	R/W	READ/WRITE R/W=0...READ R/W=1...WRITE	
6	E	CHIP ENABLE SIGNAL	
7-14	DB0~DB7	DISPLAY DATA SIGNAL	
15	CS1	CHIP SELECT SIGNAL FOR SBN0064G(1)	
16	CS2	CHIP SELECT SIGNAL FOR SBN0064G(2)	
17	RSTB	CONTROL RESET (MODULE RESET)	
18	VOUT	OUTPUT VOTAGE FOR LCD DRIVING,-10.0V.	
19	LED- (A)	ANODE OF LED	
20	LED- (K)	CATHODE OF LED	
21	HTR +	+12V	
22	HTR -	GND (0V)	

ELECTRICAL CHARACTERISTICS							
$V_{DD}=4.7V$ to $5.3V$, $T_A=25^{\circ}C$							
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT	
			MIN.	TYP.	MAX.		
SUPPLY VOLTAGE FOR LOGIC	$V_{DD}-V_{SS}$	-	4.5	5.0	5.5	V	
SUPPLY VOLTAGE FOR LCD DRIVE	$V_{DD}-V_0$	$V_{DD}=5V$	12.6	12.9	13.2	V	
SUPPLY CURRENT FOR LOGIC	I_{DD}	$V_{DD}=5V$	-	8.2	13.0	mA	
LED BACKLIGHT	VOLTAGE	V_f	$I_f=30mA$	-	6.4	7.2	V
	CURRENT	I_f	-	-	30	-	mA
	POWER CUNSUMPTION	PD	-	-	192	-	mW
	LUMINOUS	L	-	70	-	-	cd/m^2
	COLOR	X	WHITE	.260	-	.330	
	COORDINATE	Y		.260	-	.330	
HEATER	VOLTAGE	V_{FH}	-	-	12	20	V
	RESISTANCE		-	160	210	260	OHM
	CURRENT	I_H	-	40	60	80	mA
	POWER	PH	-	0.5	0.7	0.9	W

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