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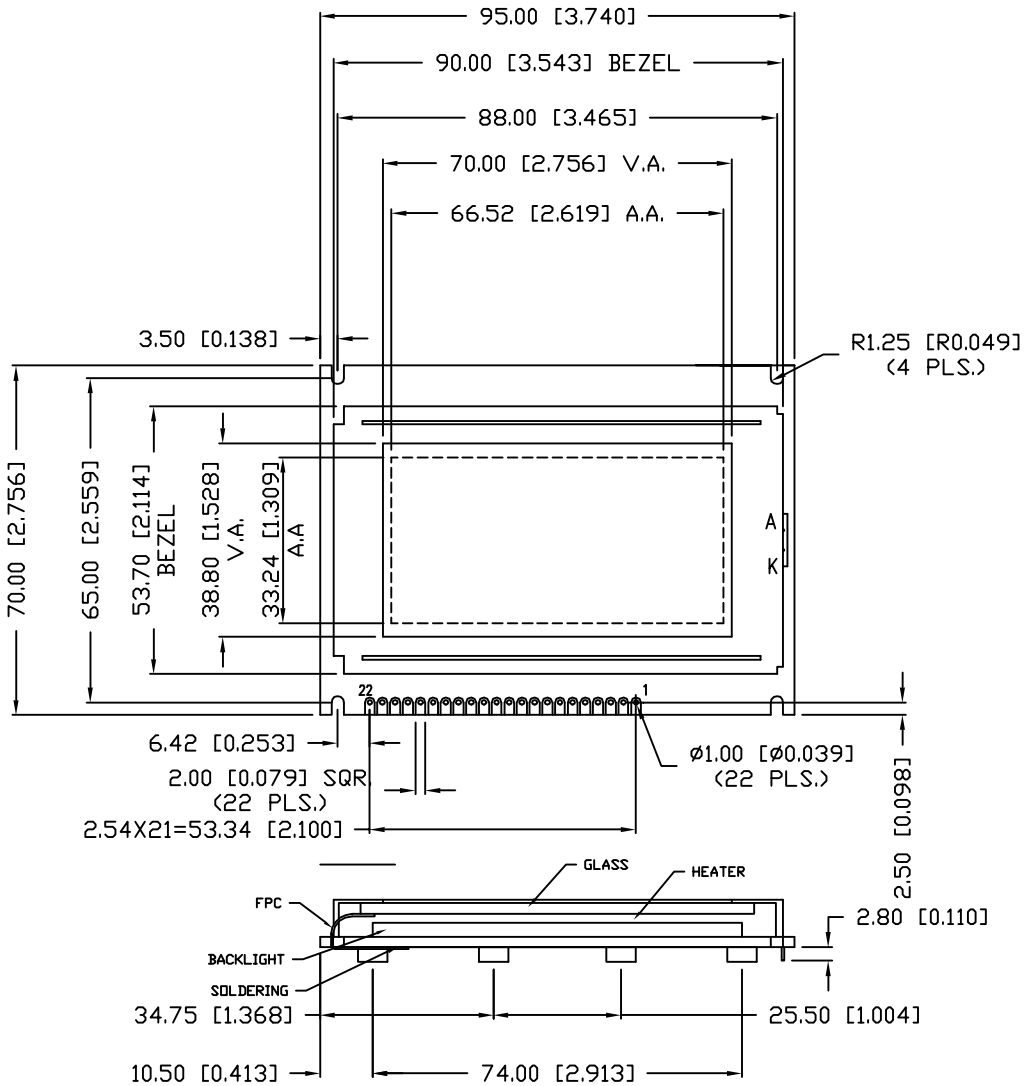
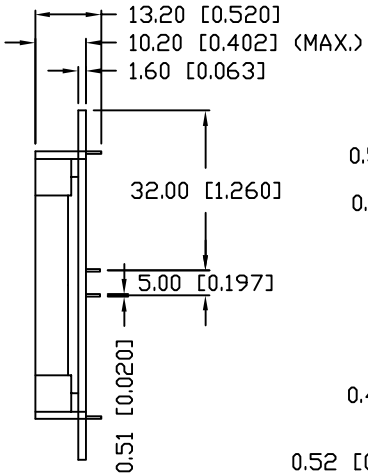
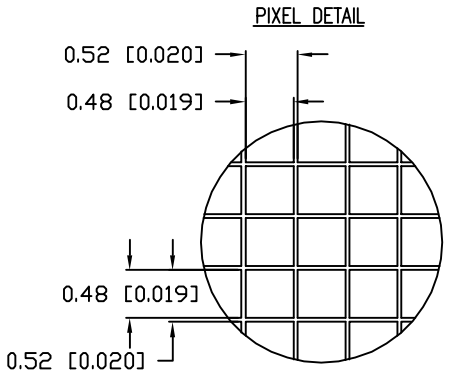
REV.	PART NUMBER
	LCR-U12864GSF-WH







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REV.	PART NUMBER
	LCR-U12864GSF-WH

128 x 64 GRAPHIC LCD MODULE, STN GRAY,
−40°C to +85°C OPERATING TEMP, W/ HEATER,
TRANSFLECTIVE, WHITE LED BACKLIGHT, 6:00 VIEW.

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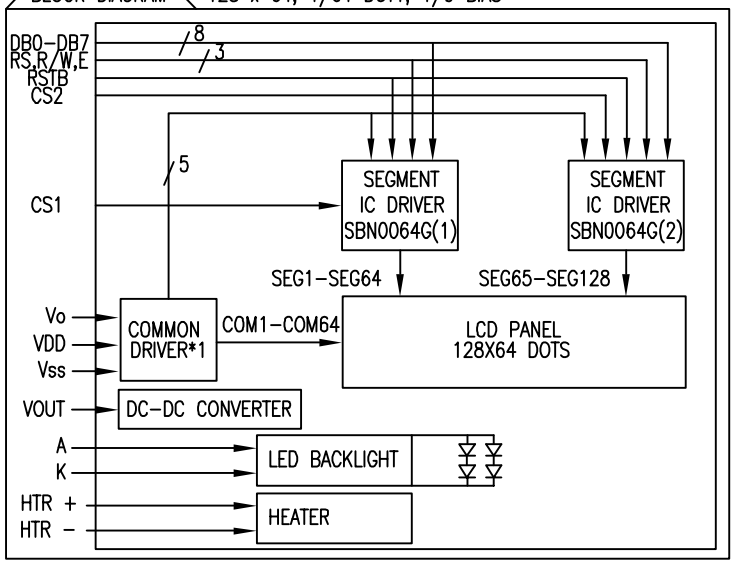
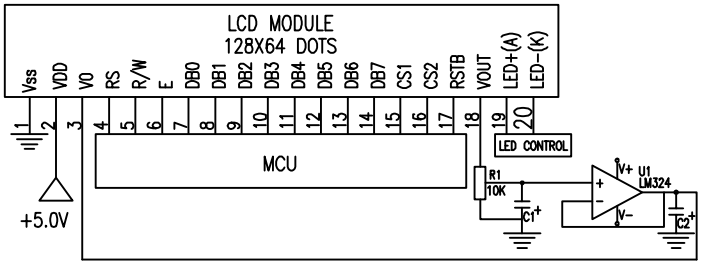
PART NUMBER	REV.
LCR-U12864GSF-WH	

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: VO IS -7.9V.



ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE MIN	STANDARD VALUE MAX	UNIT
SUPPLY VOLTAGE FOR LOGIC	V_{DD}-Vss	Ta=25°C	4.7	5.3	V
SUPPLY VOLTAGE FOR LCD DRIVE	V_{DD}-Vo	–	0	15	V
INPUT VOLTAGE	V_I	Ta=25°C	Vss	V_{DD}	V
OPERATING TEMPERATURE	Topr	W/ HEATER	-40	+85	°C
STORAGE TEMPERATURE	Tstg	W/ HEATER	-40	+85	°C

PIN CONFIGURATION

PIN NO.	SYMBOL	FUNCTION	
1	Vss	POWER SUPPLY	GND (0V)
2	V_{DD}		5V
3	Vo		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°C

ITEM		SYMBOL	CONDITION	STANDARD VALUE MIN.	STANDARD VALUE TYP.	STANDARD VALUE MAX.	UNIT
SUPPLY VOLTAGE FOR LOGIC		V_{DD}-Vss	–	4.5	5.0	5.5	V
SUPPLY VOLTAGE FOR LCD DRIVE		V_{DD}-Vo	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	Vf	If=30mA	–	6.4	7.2	V
	CURRENT	If	–	–	30	–	mA
	POWER CUNSUMPTION	PD	–	–	192	–	mW
	LUMINOUS	L	–	70	–	–	cd/m²
	COLOR COORDINATE	X	WHITE	.260	–	.330	
		Y		.260	–	.330	
HEATER	VOLTAGE	V_{fH}	–	–	12	–	V
	RESISTANCE		–	–	20	–	OHM
	CURRENT	IH	–	–	0.6	–	AMP
	POWER	PH	–	–	7.2	–	W

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