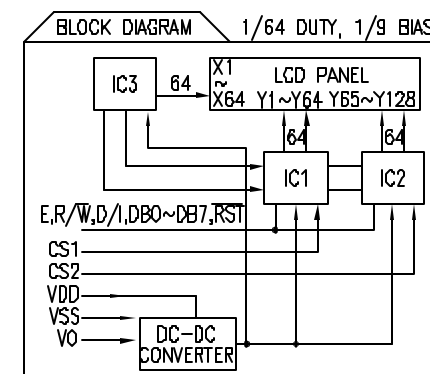
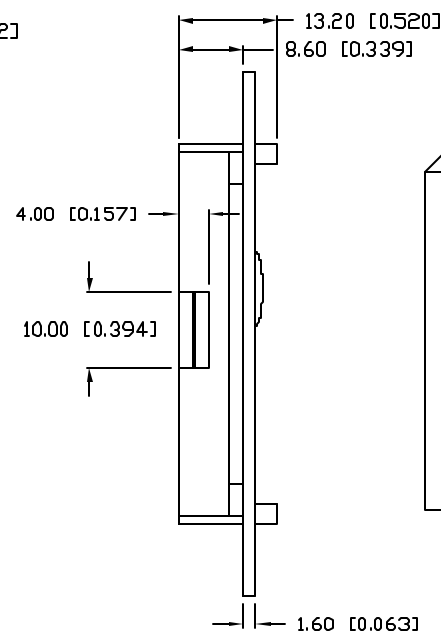
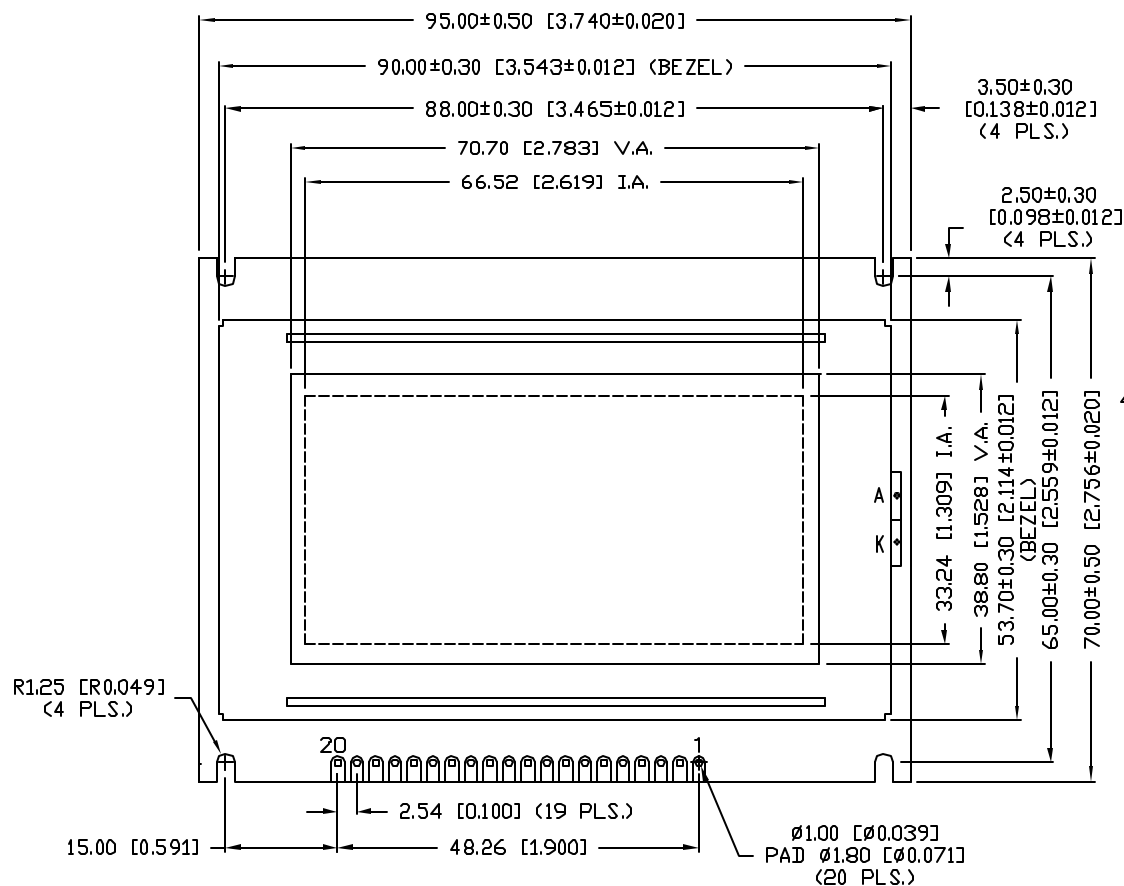
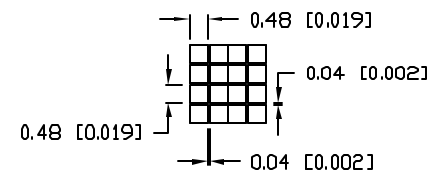


CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.

PIXEL DETAIL



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

REV.

PART NUMBER

LCM-S12864GSF/J-Y

128 x 64 DOT MATRIX GRAPHIC MODULE, STN YELLOW,
1/64 DUTY, 1/9 BIAS, NO NEGATIVE CHARGE PUMP,
TRANSFLECTIVE, LED BACKLIGHT, VLCD=9.0V

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RELIABILITY NOTE

OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.



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PAGE: 1 OF 2

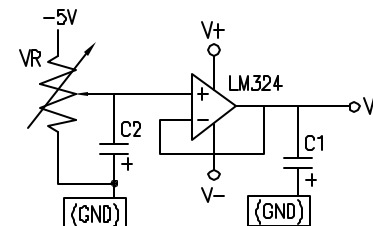
SCALE: N/A

CT

PIN CONFIGURATION

PIN NO.	SYMBOL	LEVEL	FUNCTION	
1	V _{SS}	-	POWER SUPPLY	GND (0V)
2	V _{DD}	-		5V
3	V _O	-		FOR LCD DRIVE
4	D/I	H/L	REGISTER SELECT SIGNAL H: DATA INPUT L: INSTRUCTION INPUT	
5	R/W	H/L	H: DATA READ (MODULE-->MPU) L: DATA WRITE (MODULE<--MPU)	
6	E	H,H->L	ENABLE	
7~14	DB0~DB7	H/L	DATA BUS	
15	CS1	H/L	CHIP SELECTION SIGNAL FOR IC1	
16	CS2	H/L	CHIP SELECTION SIGNAL FOR IC2	
17	RST	-	RESET SIGNAL (ACTIVE "LOW")	
18	-	-	NO CONNECTION	
19	A	-	ANODE	LED BACKLIGHT
20	K	-	CATHODE	LED BACKLIGHT

V_{DD}-V_O: LCD DRIVING VOLTAGE
VR:10K Ω



OPTIMUM CONTRAST WHEN V_O=-4.0V

ELECTRICAL CHARACTERISTICS

V_{DD}=4.5V to 5.5V, T_A=25°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 CURRENT FOR LOGIC	I _{DD}	V _{DD} =5V	-	2.6	4.0	mA
INPUT VOLTAGE	HIGH	V _{IH}	0.7*V _{DD}	-	V _{DD}	V
	LOW	V _{IL}	0	-	0.3*V _{DD}	V
*LED BACKLIGHT	VOLTAGE	V _f	-	4.2	4.5	V
	CURRENT	I _f	-	380	500	mA
	POWER CONSUMPTION	P _D	-	1.6	-	W
	LUMINOUS	L	60	90	-	cd/m ²
	COLOR	-	-	-	-	n/m

*ONLY APPLIES TO MODULES WITH BACKLIGHT

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			MIN	MAX	
SUPPLY VOLTAGE FOR LOGIC	V _{DD} -V _{SS}	T _a =25°C	0.3	7.0	V
SUPPLY VOLTAGE FOR LCD DRIVE	V _{DD} -V _O	-20°C	13.4	14.8	V
		25°C	12.2	13.6	
		70°C	11.0	12.4	
INPUT VOLTAGE	V _I	T _a =25°C	V _{SS}	V _{DD}	V
OPERATING TEMPERATURE	T _{opr}	LCM-S	-20	70	°C
STORAGE TEMPERATURE	T _{stg}	LCM-S	-30	80	°C

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REV.

PART NUMBER

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