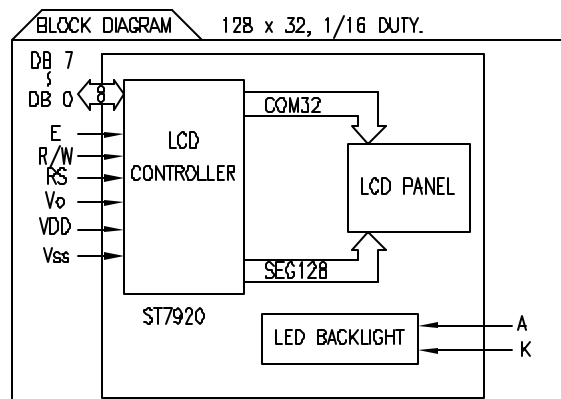
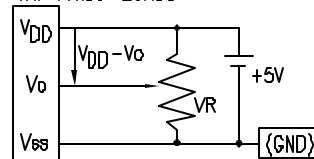


SCALE: N/A



ENGLISH: 16 CHARACTERS X 2 LINES
CHINESE: 8 CHARACTERS X 1 LINE.

$V_{DD}-V_o$: LCD DRIVING VOLTAGE
 V_R : 10K Ω - 20K Ω



PIN CONFIGURATION

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	V_{ss}	-	POWER SUPPLY
2	V_{DD}	-	
3	V_o	-	
4	RS	H/L	REGISTER SELECT
5	R/W	H/L	H: DATA READ (MODULE $\rightarrow$ MPU) L: DATA WRITE (MODULE $\leftarrow$ MPU)
6	E	H/L	ENABLE SIGNAL (NO PULL-UP RESISTOR)
7~14	DB0~DB7	H/L	DATA BUS
15	A	-	ANODE
16	K	-	CATHODE

ELECTRICAL CHARACTERISTICS

$V_{DD}=4.5V$ to $5.0V$, $T_A=25^\circ C$

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 CURRENT FOR LOGIC		I_{DD}	$V_{DD}=5V$	-	0.6	1.1	mA
INPUT VOLTAGE	HIGH	V_{IH}	-	0.8 V_{DD}	-	V_{DD}	V
	LOW	V_{IL}	-	-	0.2 V_{DD}	-	V
*LED BACKLIGHT	VOLTAGE	V_f	$I_f=60mA$	-	3.5	3.6	V
	CURRENT	I_f	-	-	60	-	mA
	POWER CONSUMPTION	PD	-	-	210	-	mW
	LUMINOUS	L	$I_f=60mA$	70	-	-	cd/m ²
	COLOR	-	-	-	470	-	nm

*ONLY APPLIES TO MODULES WITH BACKLIGHT

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			MIN	MAX	
SUPPLY VOLTAGE FOR LOGIC	$V_{DD}-V_{ss}$	$T_a=25^\circ C$	-0.3	8.0	V
SUPPLY VOLTAGE FOR LCD DRIVE	$V_{DD}-V_o$	$T_a=25^\circ C$	-0.3	12	V
INPUT VOLTAGE	V_i	$T_a=25^\circ C$	V_{ss}	V_{DD}	V
OPERATING TEMPERATURE	T_{opr}	LCM-S	0	50	$^\circ C$
STORAGE TEMPERATURE	T_{stg}	LCM-S	-20	70	$^\circ C$

*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

REV.

PART NUMBER

LCM-S12832GSF/A-B

128 x 32 GRAPHIC LCD MODULE, STN

TRANSFLECTIVE, 1/32 DUTY, BLUE BACKLIGHT.

CONFIDENTIAL INFORMATION

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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: 2 OF 2

SCALE: N/A