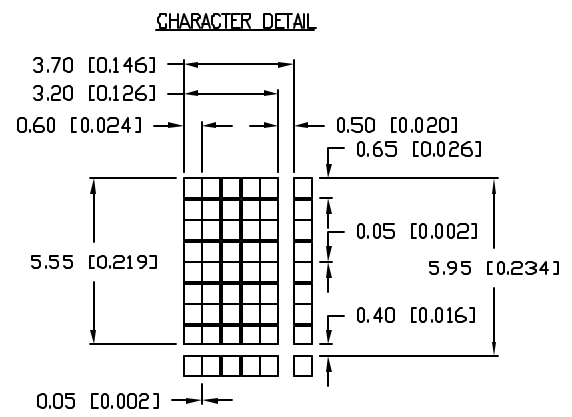
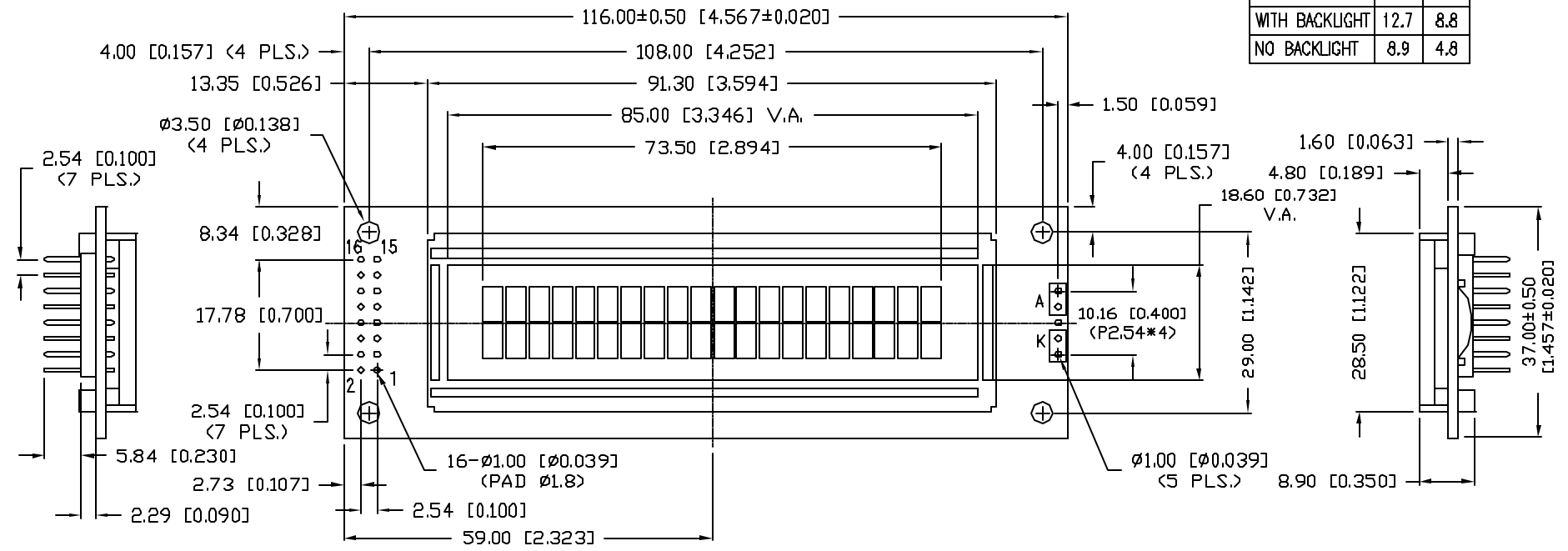


CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.



TYPE	DIM.	A	B
WITH BACKLIGHT		12.7	8.8
NO BACKLIGHT		8.9	4.8



*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 -0.00 MAX.= +0.00 -DECIMAL PRECISION

REV.	PART NUMBER
	LCM-S02002DSR10332

5.55mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX,
20 x 2 LCD MODULE, 1/16 DUTY, 1/5 BIAS, STN, REFLECTIVE,
WITH AMP HEADER P/N 10332B-7 OR EQUIVALENT.

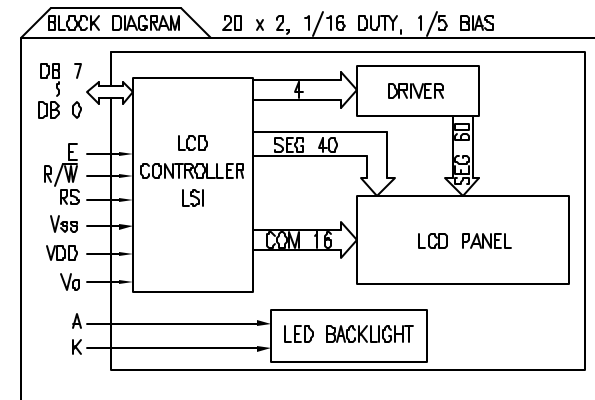
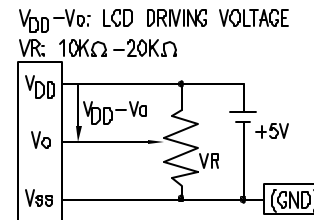
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RELIABILITY NOTE
OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.

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PIN CONFIGURATION						
PIN NO.	SYMBOL	LEVEL	FUNCTION			
1	V _{SS}	-	POWER SUPPLY	GND (0V)		
2	V _{DD}	-		5V		
3	V ₀	-		FOR LCD DRIVE		
4	RS	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—SOFTWARE SELECTABLE 4 OR 8 BIT MODE.			
15	A	-	ANODE	LED BACKLIGHT		
16	K	-	CATHODE	LED BACKLIGHT		



ELECTRICAL CHARACTERISTICS						
V _{DD} =4.7V to 5.3V, T _A =25°C						
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN.	TYP.	MAX.	
SUPPLY VOLTAGE FOR LOGIC	V _{DD} -V _{SS}	-	-	5.0	-	V
SUPPLY CURRENT FOR LOGIC	I _{DD}	V _{DD} =5V	-	2.0	3.0	mA
INPUT VOLTAGE	HIGH	V _{IH}	-	2.2	-	V _{DD} V
	LOW	V _{IL}	-	0	-	0.5 V
OUTPUT VOLTAGE	HIGH	V _{OH}	-	2.4	-	V
	LOW	V _{OL}	-	-	-	0.4 V
*LED BACKLIGHT	VOLTAGE	V _f	I _f =210mA	-	4.2	4.5 V
	CURRENT	I _f	-	-	210	- mA
	POWER CONSUMPTION	P _D	-	-	882	- mW
	LUMINOUS	L	I _f =210mA	70	-	- cd/m ²
	COLOR	-	-	-	-	- 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°C	4.7	5.3	V	
SUPPLY VOLTAGE FOR LCD DRIVE	V _{DD} -V ₀	-	4.2@50°C	4.8@0°C	V	
INPUT VOLTAGE	V _I	T _a =25°C	V _{SS}	V _{DD}	V	
OPERATING TEMPERATURE	T _{opr}	LCM-S	0	50	°C	
		LCM-H	-20	70	°C	
STORAGE TEMPERATURE	T _{stg}	LCM-S	-20	70	°C	
		LCM-H	-30	85	°C	

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