

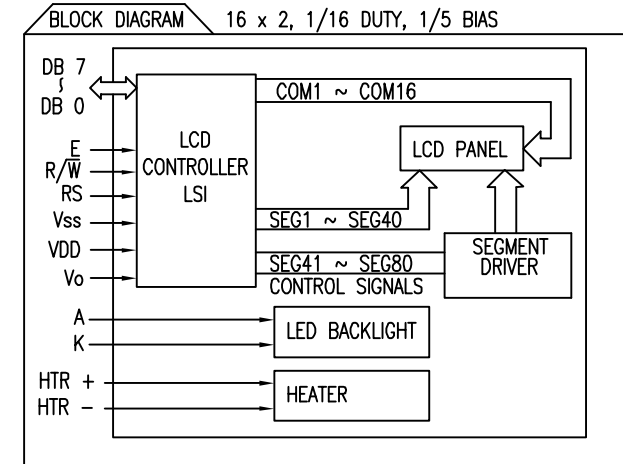
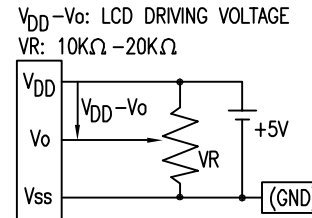
CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.



*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 MAX.= +0.00 -DECIMAL PRECISION

REV.	PART NUMBER LCR-U01602DSF/A-WH	<p>CONFIDENTIAL INFORMATION THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.</p> <p>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.</p>		290 E. HELEN ROAD PALATINE, IL 60067-6976 PHONE: +1.847.359.2790 US WEB: www.lumex.com TW WEB: www.lumex.com.tw
	16 x 2 CHARACTER LCD MODULE, STN GRAY, -40°C TO +85°C OPERATING TEMPERATURE, W/ HEATER, TRANSFLECTIVE, WHITE LED BACKLIGHT, 6:00 VIEW.		DRAWN BY: JN CHECKED BY: APPROVED BY:	DATE: 11.13.09 PAGE: 1 OF 2 SCALE: N/A

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	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	
17	HTR +	-	+12V		
18	HTR -	-	GND (0V)		



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	-	1.6	2.5	mA	
INPUT VOLTAGE	HIGH	V _{IH}	-	2.2	-	V _{DD} V	
	LOW	V _{IL}	-	0	-	0.6 V	
OUTPUT VOLTAGE	HIGH	V _{OH}	-	2.4	-	V	
	LOW	V _{OL}	-	-	-	0.4 V	
LED BACKLIGHT	VOLTAGE	V _f	I _f =15mA	-	6.2	6.8	V
	CURRENT	I _f	-	-	15	-	mA
	POWER CONSUMPTION	PD	-	-	90	-	mW
	LUMINOUS	L	I _f =15mA	70	-	-	cd/m ²
	COLOR COORDINATE	X Y	WHITE	.240 .240	- -	.330 .330	
HEATER	VOLTAGE	V _{fH}	-	-	12	-	V
	RESISTANCE		-	-	11	-	OHM
	CURRENT	I _H	-	-	1.1	-	AMP
	POWER	PH	-	-	13.1	-	W

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 _O	-	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}	W/ HEATER	-40	+85	°C
STORAGE TEMPERATURE	T _{stg}	W/ HEATER	-40	+85	°C

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Mouser Electronics

Authorized Distributor

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