

UNCONTROLLED DOCUMENT

ELECTRICAL CHARACTERISTICS

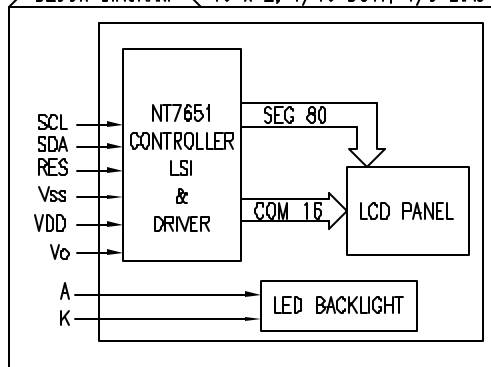
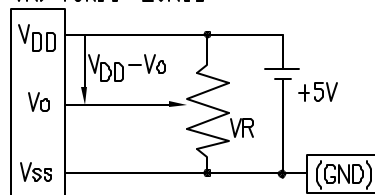
 $V_{DD}=2.2V$ to $3.5V$, $T_A=25^{\circ}C$

ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN.	TYP.	MAX.	
SUPPLY VOLTAGE FOR LOGIC	$V_{DD}-V_{SS}$	—	2.2	3.0	3.5	V
SUPPLY CURRENT FOR LOGIC	I_{DD}	$V_{DD}=3.0V$	—	0.17	1.0	mA
INPUT VOLTAGE	HIGH	V_{IH}	—	2.2	—	V_{DD} V
	LOW	V_{IL}	—	—	0.6	V
OUTPUT VOLTAGE	HIGH	V_{OH}	—	2.4	—	V
	LOW	V_{OL}	—	—	0.4	V
*LED BACKLIGHT	VOLTAGE	V_F	$I_f=40mA$	—	3.4	V
	CURRENT	I_f	—	—	40	mA
	POWER CONSUMPTION	P_D	$I_f=40mA$	—	136	mW
	BRIGHTNESS	—	—	—	350	cd/m ²
	COLOR	—	WHITE	—	—	nm

PIN CONFIGURATION

PIN NO.	PIN OUT	LEVEL	DESCRIPTION
1	VSS	0V	POWER SUPPLY GROUND/ CATHODE LED BACKLIGHT.
2	VDD	3.0V	POWER SUPPLY VOLTAGE.
3	V_o	---	CONTRAST ADJ.
4	SDA	H/L	IIC BUS SERIAL DATA INPUT/OUTPUT
5	SCL	H/L	IIC BUS SERIAL CLOCK INPUT
6	A	3.4V	ANODE LED BACKLIGHT
7	RES	H	RESET INPUT

BLOCK DIAGRAM 16 x 2, 1/16 DUTY, 1/5 BIAS

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

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	MIN	MAX	UNIT
POWER SUPPLY VOLTAGE	$V_{DD}-V_{SS}$	-5	6.5	V
POWER SUPPLY FOR LCD	$V_{DD}-V_o$	-5	7.5	V
LED POWER DISSIPATION	P_{AD}	—	0.46	W
LED FORWARD CURRENT	I_{AF}	—	60	mA
LED REVERSE VOLTAGE	VR	—	5	V
OPERATING TEMPERATURE		-20	-70	C
STORAGE TEMPERATURE		-30	+80	C

*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

LCD-E01602DSF/A-W

16 X 2 CHARACTER LCD MOD, STN TRANSFLECTIVE

I²C INTERFACE, NT7651, WHITE LED BKL.

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.

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.



290 E. HELEN ROAD
PALATINE, IL 60067-6976
PHONE: +1.847.359.2790
US WEB: www.lumex.com
TW WEB: www.lumex.com.tw

DRAWN BY:

JG

CHECKED BY:

APPROVED BY:

DATE: 3.29.07

PAGE: 1 OF 1

SCALE: N/A