

INTERFACE PIN CONNECTION

LCT-H320240M35W	PART NUMBER

REV.

POWER SUPPLY ( )		L	טופוואר טאוא ווירטוי(וינט)	70 70	_
			DICITAL DATA INDIT (DED)		_
אס אפר SO –			DIGITAL DATA INPUT.(GRFFN)	29 G7	_
			DIGITAL DATA INPUT.(GREEN)	28   G6	
CONTROL BUS T			DIGITAL DATA INPUT.(GREEN)	27 G5	_
			DIGITAL DATA INPUT.(GREEN)	26 G4	_
			DIGITAL DATA INPUT.(GREEN)	25   63	_
BLOCK DIAGRAM			DIGITAL DATA INPUT.(GREEN)	24 G2	
			DIGITAL DATA INPUT.(GREEN)	23   61	
			DIGITAL DATA INPUT.(GREEN)	22   60	_
			DIGITAL DATA INPUT.(BLUE)	21   87	
NOT CONNECT.	NC	50	DIGITAL DATA INPUT.(BLUE)	20 B6	_
NOT CONNECT.	NC	49	DIGITAL DATA INPUT.(BLUE)	19 B5	_
POWER INPUT PIN.	VDDIO	48	DIGITAL DATA INPUT.(BLUE)	18   B4	
INPUT PIN TO SELECT COLOR MAPPING.	BGR	47	DIGITAL DATA INPUT.(BLUE)	17   B3	
INPUT PIN TO SELECT 262K-COLOR OR 8-COLOR DISPLAY	CM	46	DIGITAL DATA INPUT.(BLUE)	16 B2	_
INPUT PIN TO SELECT THE SOURCE DRIVER DATA SHIFT DIR	RL	45	DIGITAL DATA INPUT.(BLUE)	15 B1	
INPUT PIN TO SELECT THE DISPLAY REVISION.	REV	44	DIGITAL DATA INPUT.(BLUE)	14 B0	
INPUT PIN TO SELECT THE GATE DRIVER SCAN DIRECTION.	ТВ	43	DATA PIN OF SERIAL INTERFACE.	13   SDI	
DISPLAY SHUT DOWN PIN TO PUT THE DRIVER INTO SLEEP	SHUT	42	CLOCK PIN OF SERIAL INTERFACE.	12   SCK	
DOT-CLOCK SIGNAL AND OSCILLATOR SOURCE.	DOTCLK	41	CHIP SELECT PIN OF SERIAL MODE.	11 CSB	
FRAME SYNCHRONIZATION SIGNAL.	VSYNC	40	SYSTEM RESET PIN.	10 RESB	
LINE SYNCHRONIZATION SIGNAL.	39 HSYNC	39	DATA OUTPUT PIN IN SERIAL MODE.	9 SD0	
DISPLAY ENABLE PIN FROM CONTROLLER.	DEN	38	POLARITY SIGNAL TO MONITOR VCOM SIGNAL.	8 POL	
DIGITAL DATA INPUT.(RED)	R7	37	DATA SEQUENCE CONTROL PIN.	7 QXH	
DIGITAL DATA INPUT.(RED)	R6		GROUND.	6 VSS	
DIGITAL DATA INPUT.(RED)	R5	35	GROUND.	5 VSS	
DIGITAL DATA INPUT.(RED)	R4	34	CATHODE OF BACKLIGHT SUPPLY.	4   K	
DIGITAL DATA INPUT.(RED)	R3		CATHODE OF BACKLIGHT SUPPLY.	3   K	
DIGITAL DATA INPUT.(RED)	R2	32	ANODE OF BACKLIGHT POWER SUPPLY(DC 10V).	2   A	
DIGITAL DATA INPUT.(RED)	R1	31	ANODE OF BACKLIGHT POWER SUPPLY(DC 10V).	1 A	
FUNCTION	SYMBOL	PIN	FUNCTION	PIN SYMBOL	
					_

DISPLAY MODE

DIRECTION

SLEEP MODE

Z

LED CATHODE

LED ANODE DATA BUS

¥

TFT LCD PANEL

3.5 INCH

HX8238-A

LCD DATA OUT(320XRGB)

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RELUBLITY 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.

6:00 VIEW, LED

BACKLIGHT,

-20°C

TO +70°C OPERATING TEMP

ហ៊ី

ACTIVE MATRIX FULL COLOR TFT PANEL

\_CT-H320240M35W

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

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## ELECTRICAL CHARASTERISTICS

TEW	CVMDOI	STAI	STANDARD VALUE	ALUE		DEMADIC
	STMBOL	MIN	TYP.	MAX	ONI	NEWANNA
	VDD	1.8	-	2.5	٧	
POWER VOLTAGE	VDDIO	1.4	-	3.6	<	
	VIC	2.5₀NDDIQ	1	3.6	<	
GATE ON VOLTAGE	VGH	9.3	15	16.5	<	
GATE OFF VOLTAGE	VGL	-15	-10	-5.1	<	
INPUT HIGH VOLTAGE	ИIV	0.8*VDDIO	-	VDDIO	٧	
INPUT LOW VOLTAGE	VIL	Vss	1	0.2*VDDI0	<	
OUTPUT HIGH VOLTAGE	VOH	0.9*VDDIO	ı	VDD	<	10H=100uA
OUTPUT LOW WOLTAGE	VOL	Vss	ı	0.1*VDDI0	<	IOL=100uA
VCOM HIGHT OUTPUT VOLTAGE	VCOMH	2.5	3.6	4.5	<	
VCOM LOW OUTPUT VOLTAGE	VCOML	-3.0	-2.4	0	<	

		SS	50000 HOURS	50		HALF-BRIGHTNESS LIFE TIME
		ED	LED PATENTED	Æ		REMARK
MIN/MAX*100%	%	ı	85	80	▷	UNIFORMITY
$cd/m^2$ If=40mA	cd/m²	ı	3000	2800	Lv	LUMINANCE (BLU ONLY)
	1	0.32	1	0.26	~	CHINCIPING
	1	0.32	1	0.26	×	CHROMACITY COORDINATES
Vr=15V	Α	200	ı	ı	=	RESERVE CURRENT
	<	15	ı	10.5	Vr	REVERSE VOLTAGE
	mA	50	ı	35	lfm	ABSOLUTE MAX FORWARD CURRENT
lf=40mA	٧	10.5	10	8.8	Vf	FORWARD VOLTAGE
IVEINIMINING	CIVI	MAX	TYP.	MIN	SIMBUL	1 2
DEMADES	LIMI	LUE	STANDARD VALUE	STA	CVMDOI	Mari
						BACKLIGHT SPECIFICATIONS

ABSOLUTE MAXIMUM RATINGS

TOM	2000	TEST	STA	STANDARD VALUE	LUE	
	OIMDUL	CONDITION	NIN	TYP.	MAX	CIVI
POWER VOLTAGE	Olddy	Vss=0	-0.3	-	4.0	٧
	VDD	Vss=0	-0.3	_	2.7	٧
	VIC	Vss=0	Vss=0 Vss-0.3	I	5.0	<

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6:00 VIEW, LED

BACKLIGHT,

-20°C

TO +70°C OPERATING TEMP

3.5

ACTIVE MATRIX FULL COLOR TFT PANEL

\_CT-H320240M35W

PART NUMBER

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290 E. HELEN ROAD
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MAX.= +0.00 -DECIMAL

PRECISION

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# UNCONTROLLED DOCUMEN,

OPTICAL CHARASTERISTICS

Mali

SYMBOL

CONDITION

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 $\dashv$ 

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# \_CT-H320240M35W

PART NUMBER

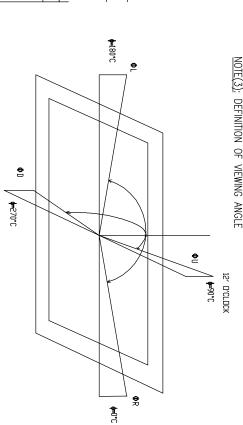
REV.

STANDARD VALUE ¥ 35 5 MAX 50 20 S < NOTE  $\underline{\text{NOIE}(2)}$ : DEFINITION OF CONTRAST RATIO CR=BRIGHTNESS AT ALL PIXELS "BLACK"

 $\operatorname{\mathtt{NOTE}(4)}$ : MEASURED AT CENTER POINT VERTICALLY WITH BACKLIGHT ON."

NOTE(5): AFTER STABILIZING AND LEAVING THE PANEL ALONE AT GIVEN TEMPERATURE FOR 30MIN, THE MEASUREMENT SHOULD BE EXECUTED. MEASURMENT SHOULD BE EXECUTED IN STABLE, WINDLESS, AND DARK ROOM 30 MINS AFTER LIGHTING THE BACK-LIGHT. THIS SHOULD BE MEASURED IN THE CENTER OF SCREEN.

ENVIROMENT CONDITION: Ta=25±2°C BACK-LIGHT ON CONDITION



6' D'CLDCK

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IME

LCT—H320240M35W PART NUMBER

REV.

OPTICAL RESPONSE

10% 0%

100% 90%

<del>,</del> Α

DISPLAY DATA

WHITE (TFT OFF)

BLACK

(TFT ON)

MHITE

(TFT OFF)

NOTE(1): DEFINITION OF

RESPONSE

TME

OPTIMUM VIEWING DIRECTION

≶ × ₽ 짲 Q S ൞ χ,

6 0'CLOCK

0.319 0.282

0.349

0.379 0.342

0.312

"SIMULATION DATA REFERENCE ONLY"

0.268

0.298

0.3280.3740.670

0.610 0.314

> 0.640 220

0.344

200

0.107 0.102 0.553

0.137 0.132 0.583

0.167 0.162 0.613

> ONLY" REFERENCE "SIMULATION

COLOR CROMACITY

(CIE1931)

LUMINANCE OF WHITE (CENTER POINT OF LCM)

CONTRAST RATIO

VIEWING ANGLE (CRNO)

**UPPER** 

\_OWER

35

ı

PEG

G

15

DEG DEG RIGHT

100

R

150

250

ı

DEG

S ν.

国

**=**180°C **90°**C **€**270°C

> 45 45

RESPONSE TIME

6:00 VIEW, LED ហ៊ី ACTIVE MATRIX FULL COLOR TFT PANEL BACKLIGHT, -20°C 7 +70°C OPERATING TEMP

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# STANDARD SPECIFICATION FOR REABILITY

# STANDARD SPECIFICATION OF REABILITY TEST

7		0	رن ت	4	3	2	_	N
DROP TEST		TEMPERATURE CYCLE	HIGH TEMPERATURE/ HUMIDITY OPERATION	LOW TEMPERATURE OPERATION	HIGH TEMPERATURE OPERATION	LOW TEMPERATURE STORAGE	HIGH TEMPERATURE STORAGE	TEST ITEM
ENDURANCE TEST APPLYING THE DROP DURING TRANSPORTATION.	MECHANICAL TEST	ENDURANCE TEST APPLYING THE LOW AND HIGH TEMPERATURE CYCLE.  -20°C  25°C  70°C  30 MIN  5 MIN  1 CYCLE	ENDURANCE TEST APPLYING THE ELECTRIC STRESS (VOLTAGE & CURRENT) AND TEMPERATURE / HUMIDITY STRESS TO THE ELEMENT FOR A LONG TIME.	ENDURANCE TEST APPLYING THE ELECTRIC STRESS UNDER LOW TEMPERATURE FOR A LONG TIME.	ENDURANCE TEST APPLYING THE ELECTRIC STRESS (VOLTAGE & CURRENT) AND THE THERMAL STRESS 70+/-3°C 240HRS TO THE ELEMENT FOR A LONG TIME.	ENDURANCE TEST APPLYING THE LOW STORAGE TEMPERATURE FOR A LONG TIME.	ENDURANCE TEST APPLYING THE HIGH STORAGE TEMPERATURE FOR A LONG TIME.	CONTENT OF TEST
PACKED,100cm FREE FALL(6 SLIDES, 1 CORNER, 3 EDGES)		-20°C/ 70°C 10 CYCLES	40°C, 90%RH 120HRS	-20+/-3°C 240HRS	70+/-3°C 240HRS	-30+/-3°C 240HRS	80+/-3°C 240HRS	TEST CONDITION
1 1		 	MIL-202E-103B JIS-C5023	1 1 1			1 1 1	APPLICABLE STANDARD

- 1. FOR OPERATION TEST, ABOVE SPECIFICATION IS APPLICABLE WHEN TEST PATTERN IS CHANGING DURING ENTIRE OPERATION TEST.
  2. INSPECTIONS AFTER RELIABILITY TESTS ARE PERFORMED WHEN THE DISPLAY TEMPERATURE RESUMES BACK TO ROOM TEMPERATURE.
  3. IT IS A NORMAL CHARACTERISTIC THAT SOME DISPLAY ABNORMALITY CAN BE SEEN DURING REABILITY TEST. IF THE DISPLAY ABNORMALITY CAN RESUME BACK TO NORMAL CONDITION AT ROOM TEMPERATURE WITHIN 24 HOURS, THERE IS NO PERMANENT DESTRUCTION OVER THE DISPLAY. THE DISPLAY STILL POSSESSES ITS FUNCTIONALITY AFTER REABILITY TESTS



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ACTIVE MATRIX FULL COLOR TFT PANEL

LCT—H320240M35W

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### QUALITY ASSURANCE

ACCEPTABLE QUALITY LEVEL (AQL)

EACH LOT SHOULD SATISFY THE QUALITY LEVEL DEFINED AS FOLLOWS:

A. INSPECTION METHOD: MIL-SDT-105E LEVEL II NORMAL ONE TIME SAMPLING. B. AQL LEVEL.

						STANDARD.	1.00%	MINON
1, now SATISFY ALL FUNCTIONS AS PRODUCT BUT NOT SATISFY COSMETIC	I NC	_ p	PRODUCT	AS	<b>FUNCTIONS</b>	SATISFY ALL	1 00%	•
			PRODUCT.	S	DEFECTIVE	0.25% FUNCTIONAL DEFECTIVE AS PRODUCT.	0.25%	MAJOR
			DEFINITION				AQL	CATEGORY

## COSMETIC SCREENING CRITERIA

MAJON	NOT ACCEPTABLE.	DISPLAY	c
	THE PATTERNS OF DISPLAY SHALL LIGHT UP AS		D.
MAJOR	SHORT CIRCUIT ARE NOT ACCEPTABLE.	2	5
	DIM DISPLAY ON THE PATTERNS FYTRA PATTERN AND!	DISDI AY	
MINOR	OBVIOUS UNVEN COLOR (RAINBOW) SHALL NOT BE NOTICEABLE.	RAINBOW	4
MINOR	5mm EACH OTHER.	DENSITY	د
	ABOVE DEFECTS SHOULD BE SEPARATED MORE THAN	ALLOWABLE /	7
	W>0.05 DISREGARD 0	,	
	W≤0.05 L ≤ 2.0 3	(LINE TYPE)	
MINON	W≤0.03 L ≤ 1.0 DISREGARD	BLACK STREAK	_
	W≤0.02 DISREGARD DISREGARD	SCRATCHES/	)
	WIDTH, W(mm) LENGTH, L(mm) IN ACTIVE AREA	DUST/	
	ACCEPTABLE QUANTITY		
	D>0.20 0	(ROUND TYPE)	
MINOR	0.15<0×0.20 JISKEGAKU	/BUBBLE	_
	m) ACCEPTABLE (	SPOTS/DUST	
CATEGORY	JUDGMENT CRITERIA	DEFECT	8

NOTE: D= (LONG LENGTH + SORTH LENGTH)/2

## FAILURE JUDGMENT CRITERIA

AFTER REABILITY TEST ABOVE, TEST SAMPLE SHALL BE LET RUN TO ROOM TEMPERATURE AND HUMIDITY AT LEAST 4 HOURS BEFORE FINAL TESTS ARE CARRIED OUT.

OUT OF APPERANCE STANDARD.	OPTICAL CHARACTERISTIC
MECHANICAL CHARACTERISTIC OUT OF MECHANICAL SPECIFICATION.	MECHANICAL CHARACTERISTIC
ELECTRICAL CHARACTERISTIC ELECTRICAL SHORT AND OPEN.	ELECTRICAL CHARACTERISTIC
FAILURE JUDGMENT CRITERIA	CRITERION ITEM

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## PRECAUTIONS FOR USING LCD MODULE

- 1, THE DISPLAY PANEL IS MADE OF GLASS AND POLARIZER. DO NOT SUBJECT IT TO MECHANICAL SHOCK BY DROPPING OR IMPACT WITCH MAY CAUSE CHIPPING ESPECIALLY ON THE EDGES.
- 2. DO NOT TOUCH, PUSH OR RUB THE EXPOSED POLARIZERS WITH ANYTHING HARDER THAN AN HB PENCIL (GLASS,TWEEZERS, ETC.). THE POLARIZER COVERING THE DISPLAY SURFACE OF THE LCD MODULE IS
- POLARIZER SURFACE. ALCOHOL. AVOID USING SOLVENTS LIKE ACETONE (KETENE), WATER, TOLUENE, ETHANOL TO CLEAN THE A SOFT DRY CLOTH. IF IT IS HEAVILY CONTAMINATED, MOISTEN CLOTH WITH ISOPROPYL ALCOHOL OR ETHYL SOFT AND EASILY SCRATCHED. HANDLE THIS POLARIZER CAERFULLY. 3. IF THE DISPLAY SURFACE BECOMES CONTAMINATED, BREATHE ON THE SURFACE AND GENTLY WIPE IT WITH
- 4. PLEASE KEEP THE TEMPERATURE WITHIN SPECIFIED RANGE FOR USE AND STORAGE. POLARIZATION DEGRADATION, BUBBLE GENERATION OR POLARIZER PEEL-OFF MAY OCCUR WITH HIGH TEMPERATURE AND HIGH HUMIDITY.
- 5. DO NOT APPLY EXCESSIVE FORCE TO THE DISPLAY SURFACE OR THE ADJOINING AREAS SINCE THIS MAY CAUSE THE COLOR TONE TO VARY.
- 6. INSTALL THE LCD MODULE BY USING THE MOUNTING HOLES. WHEN MOUNTING THE LCD MODULE MAKE
- ENVIRONMENT. ACCELERATED BY WATER DROPLETS, MOISTURE CONDENSATION OR A CURRENT FLOW IN A HIGH-HUMIDITY SURE IT IS FREE OF TWISTING, WARPING AND DISTORTION.
  7. EXERCISE CARE TO MINIMIZE CORROSION OF THE ELECTRODES IS
- 8. NC TERMINAL SHOULD BE OPEN. DO NOT CONNECT ANYTHING.
  9. IF THE LOGIC CIRCUIT POWER IS OFF, DO NOT APPLY THE INPUT SIGNALS.
- 10. AVOID CONTACTING OIL AND FATS.
- A CONTAINER BEFORE COMING IN CONTACT WITH ROOM TEMPERATURE AIR. 11. CONDENSATION ON THE SURFACE AND CONTACT WITH TERMINALS DUE TO COLD WILL DAMAGE, STAIN OR DIRTY THE POLARIZERS. AFTER PRODUCTS ARE TESTED AT LOW TEMPERATURE THEY MUST BE WARMED UP IN
- MAY CAUSE DEFORMATION OR COLOR FADING. 12. WIPE OFF SALIVA OR WATER DROPS IMMIDEATLY, CONTACT WITH WATER OVER A LONG PERIOD OF TIME

# ELECTRO-STATIC DISCHARGE CONTROL

- ELECTROSTATIC DISCHARGE AS FOR AN ORDINARY CMOS IC. SINCE THIS MODULE USES A CMOS LSI, THE SAME CAERFUL ATTENTION SHOULD BE PAID 70
- 2. BE SURE TO GROUND THE BODY WHEN HANDLING THE LCD MODULES. TOOLS REQUIRED FOR ASSEMBLING, SUCH AS SOLDERING IRONS, MUST BE PROPERLY GROUNDED.
- 3. TO REDUCE THE AMOUNT OF STATIC ELECTRICITY GENERATED, DO NOT CONDUCT ASSEMBLING AND OTHER WORK UNDER DRY CONDITIONS. TO REDUCE THE GENERATION OF STATIC ELECTRICITY, BE CARFUL THAT THE AIR IN THE WORK AREA IS NOT TOO DRY. A RELATIVE HUMIDITY OF 50%-60% IS RECOMMENDED.
- 4. THE LCD MODULE IS COATED WITH A FILM TO PROTECT THE DISPLAY SURFACE. EXERCISE CARE WHEN PEELING OFF THIS PROTECTIVE FILM SINCE STATIC ELECTRICITY MAY BE GENERATED.
- 5. WHEN SOLDERING THE TERMINAL OF LCM, MAKE CERTAIN THE AC POWER SOURCE FOR THE SOLDERING IRON DOES NOT LEAK.

# RECAUTION OF SOLDERING TO THE LCM

\_CT-H320240M35W

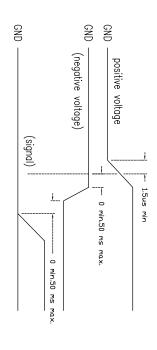
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- 1, OBSERVE THE FOLLOWING WHEN SOLDERING LEAD WIRE, CONNECTOR CABLE AND ETC. TO THE LCD
- SOLDERING IRON TEMPERATURE: 300~350°C
- SOLDER: EUTECTIC SOLDER SOLDERING TIME: \$3 SEC.
- ABOVE IS A RECOMMENDED APPROACH. DUE TO DIFFERENT SOLDER COMPOSITION AND PROCESSING METHOD, IT IS RECOMMENDED THAT CUSTOMER TO STUDY AND FINE TUNING THEIR SOLDERING PROCESS PARAMETERS ACCORDINGLY.
- FLUX SPATTERS THAT YOU PROTECT THE LCD SURFACE WITH A COVER DURING SOLDERING TO PREVENT ANY DAMAGE DUE TO 2. IF SOLDERING FLUX IS USED, BE SURE TO REMOVE ANY REMANING FLUX AFTER FINISHING TO SOLDERING OPERATION. (THIS DOES NOT APPLY IN THE CASE OF A NON-HALOGEN TYPE OF FLUX.) IT IS RECOMMENDED

## PRECAUTION FOR OPERATION

- 1. VIEWING ANGLE VARIES WITH THE CHANGE OF LIQUID CRYSTAL DRIVING VOLTAGE (Vo). ADJUST Vo SHOW THE BEST CONTRAST.
- 2. DRIVING THE LCD IN THE VOLTAGE ABOVE THE LIMIT SHORTERNS ITS LIFETIME
- 3. RESPONSE TIME IS GREATLY DELAYED AT TEMPERATURE BELOW THE OPERATING TEMPERATURE RANGE HOWEVER, IT WILL RECOVER WHEN IT RETURNS TO THE SPECIFIED TEMPERATURE RANGE.
- 4. IF THE DISPLAY AREA IS PUSHED HARD DURING OPERATION, THE DISPLAY WILL BECOME ABNORMAL HOWEVER, IT WILL RETURN TO NORMAL IF IT IS TURNED OFF AND THEN BACK ON.
- 5. WHEN TURNING THE POWER ON, INPUT EACH SIGNAL AFTER THE POSITIVE/NEGATIVE VOLTAGE BECOMES DESIGN). STABLE (BELOW FIGURE IS A GENERAL ILLUSRATION WHERE TYPICAL VALUE DEPENDS ON INDIVIDUAL PRODUCT



# \*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 = +0.000 (±0.000).

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RELUBLITY 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.

6:00 VIEW, LED

BACKLIGHT,

-20°C

7

+70°C

OPERATING

TEMP.

ហ៊្ម

ACTIVE MATRIX FULL COLOR TFT PANEL

LCT—H320240M35W

REV.

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

CHECKED в :: APPROVED BY: DATE: PAGE: 04.27.09

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DRAWN

В ::

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## RoHS COMPLIANT PRODUCT

- CADMIUM AND CADMIUM COMPOUNDS
   HEXAVALENT CHROMIUM COMPOUNDS
   LEAD AND LEAD COMPOUNDS
   MERCURY AND MERCURY COPMPOUNDS

- POLYBROMINATED BIPHENYLS (PBBs)
- POLYBROMINATED DIPHENYL ETHERS (PBDEs)
- LESS LESS THAN THAN THAN 1000PPN 1000PPM 100PPM
- LESS THAN THAN THAN 1000PPN 1000PPM 1000PPM

## PACKAGING STANDARD

0.6 NG	WEIGHI	12 % / X 2 = 168 PUS.	QUANTITY/ OUTER BOX
9 6 170	TIOITM	10 V 7 V 0 100 D00	QUANTITY/ INER BOX
NEW	טטא וודב	465mm × 405mm × 305mm	BOX SIZE
NOW	DOV TYPE	16E : 10E : 30E	OUTER CARTON
PAPER CARTON	BOX MATERIAL PAPER CARTON	168 PCS.	QUANTITY/ EACH BOX
	PREPARE BY:	TFT MODULE	PRODUCT NAME.
2009	RELEASE DATE   2009	LCT-H320240M35W	PRODUCT NO.

ARE 12 PCS LCD PER EACH ANTI-STATIC PLASTIC PLATE.

ARE 7 LAYER PLASTIC PLATES PER EACH INNER CARTON BOX.

ARE 2 INNER CARTON BOX PER EACH OUTER CARTON BOX.

- 1. WHEN STORING LCDS AS SPARES FOR SOME YEARS, THE FOLLOWING PRECAUCTIONS ARE NECESSARY
- TEMPERATURE BETWEEN O'C AND 35'C. STORE THEM IN A SEALED POLYETHYLENE BAG. IF PROPERLY SEALED, THERE IS NO NEED FOR DESICCANI.
   STORE THEM IN A DARK PLACE. DO NOT EXPOSE TO SUNLIGHT OR FLUORESCENT LIGHT, KEEP THE
- 4. ENVIRONMENTAL CONDITIONS:
- DO NOT LEAVE THEM FOR MORE THAN 168HRS. AT  $60^{\circ}\mathrm{C}$ . SHOULD NOT BE LEFT FOR MORE THAN 48HRS. AT  $-20^{\circ}\mathrm{C}$

### SAFETY

- 1. ITS RECOMMENDED TO CRUSH DAMAGED OR UNNECESSARY LCD INTO PIECES AND WASH THEM OFF WITH SOLVENTS SUCH AS ACETONE AND ETHANOL, WHICH SHOULD LATER BE BURNED.
  2. IF ANY LIQUID LEAKS OUT OF DAMAGED GLASS CELL AND COMES IN CONTACT WITH THE HANDS, WASH OFF THOROUGHLY WITH SOAP AND WATER.

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BACKLIGHT,

-20°C

TO +70°C OPERATING TEMP.

3.5

ACTIVE MATRIX FULL COLOR TFT PANEL

LCT—H320240M35W

PART NUMBER

REV.

DRAWN BY: CHECKED

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