



優潔光科技
UJ Light Technologies

SPECIFICATIONS FOR LCD MODULE

Model No:

UTF020B-GFC\$

UJ Light Technologies Corporation

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1. General Specification

Parameter	Value	Unit
LCD Mode	a-Si TFT/transmissive	
Number of Color	16.7M	
Display Resolution	320*3(RGB)*240	pixels
Outline Dimension	50.96(W) *45.86(H) *4.0(T)	mm
Active Area(A.A)	40.8*(H) *32.5(V)	mm
Pixel pitch	42.5(H)*127.5(V)	um
Pixel Arrangement	RGB-Vertical stripe	
Viewing Direction	All	
Display Mode	Normally Black	
Back-light	4 White LED	PCS
CTP IC	CST816T	

2. Absolute Maximum Rating

Item	Symbol	Conditions	Min	Max	Unit	Note
Power Supply Voltage for LCD	VCC	GND=0	-0.3	4.2	V	
	VGH	GND=0	-0.3	32		
	VGL		-16	0.3	V	
	VGH-VGL	GND=0	-0.3	32	V	
Signal input voltage	Vi	-	-0.2	AVDD+0.2	V	Note1
	VI	-	-0.3	VCC+0.3	V	
Operating temperature	Topa	-	-20	70	°C	
Storage temperature	Tstg	-	-30	80	°C	

Note1: If users use the product out off the environmental operation range (temperature and humidity) ,it will have visual quality concerns.

3. Electrical Characteristics

3.1 TFT LCD Electrical Characteristics

Item	Symbol	Unit	Min	Typ	Max
Common Voltage	VCOM	V	-2	-	0
Power Supply Voltage	VGH	V	10	12	15
	VGL	V	-14	-12	-9.0
	VCC	V	2.6	2.8	3.3
Input Signal Voltage	V _{IH}	V	0.7VCC	-	VCC
	V _{IL}	V	GND	-	0.3VCC

Note1: Please adjust VCOM to make the flicker level be minimum.

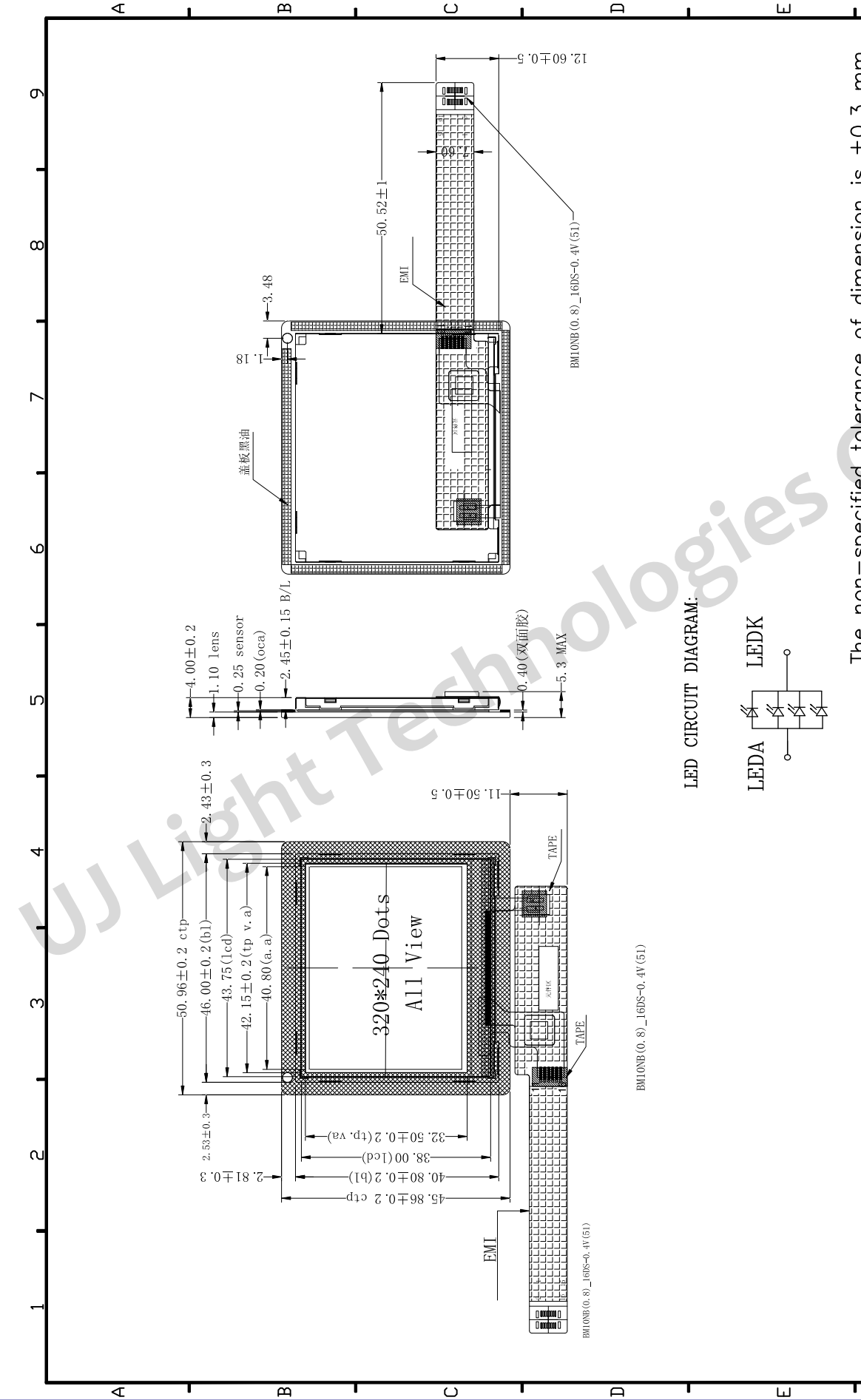
3.2 BackLight Characteristics

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply Voltage	VF	Only Backlight	3.0	3.3	3.4	V
Supply Current	IF		80			mA
Average Brightness	IV	Backlight Current IF=80mA	400	500	-	cd/m2
CIE Color Coordinate	X	Backlight Current IF=80mA	0.268	0.318	0.368	-
	Y		0.291	0.341	0.391	
Uniformity	B	Backlight Current IF=80mA	80	-	-	(%)
Color	White					

4. Interface Pin Function

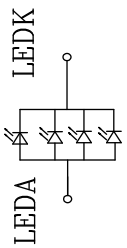
Pin NO.	Symbol	Description
1	GND	GND Power ground
2	RESET	Global rest pin
3	SCL	Serial interface clock
4	CS	Chip select input pin ("Low" enable)
5	SDI	Serial in/out signal.
6	DCX	4-line system (D/CX): Serves as command or parameter select.
7	GND	Power ground
8	VCC	Power supply (2.8V)
9	LEDA	LED Anode
10	LEDK	LED Cathode
11	GND	Power ground
12	CTP SDA	Touch IIC in/out signal
13	CTP SCL	Touch IIC serial interface clock
14	CTP VDD	Touch Power supply (3.0V)
15	CTP INT	Touch interrupt signal
16	CTP RST	Touch reset pin

5. Drawing



The non-specified tolerance of dimension is ± 0.3 mm

LED CIRCUIT DIAGRAM:



UJ LIGHT													PART_NAME		TITLE		NA							
													PART_NO.		MATERIAL		NA							
													VERSION		SURFACE		NA							
APPROVAL / DATE															UNIT		m m		TOL. UNLESS NOTED.		NA			
CHECK / DATE															SCALE		1/1		SHEET		1 OF		1	
DRAW / DATE																								
TOLERANCE UNLESS OTHERWISE SPEC.													NO.		REV.		DESCRIPTION		LOCA		DRAW		DATE	