

SHARP

LM5Q32

Color STN-LCD Module
(FA/POS/Measuring instruments)

Features

- 12.6 cm [5"] QVGA format
- Single scan (1/240 Duty)
- Normal STN interface (8-bit parallel)
- Motion picture compatible:
Fast response time (200 ms) / High contrast (30 : 1)

Specifications

Parameter		Unit
Display size	12.6 [5]	cm ["]
Dot format (H x V)	320 x RGB x 240	dot
Dot pitch (H x V)	0.105 x 0.315	mm
Active area (H x V)	100.8 x 75.6	mm
Panel type	*1	-
Panel mode	Transmissive	-
Contrast ratio	30 : 1	-
Response time	200	ms
Brightness	100	cd/m ²

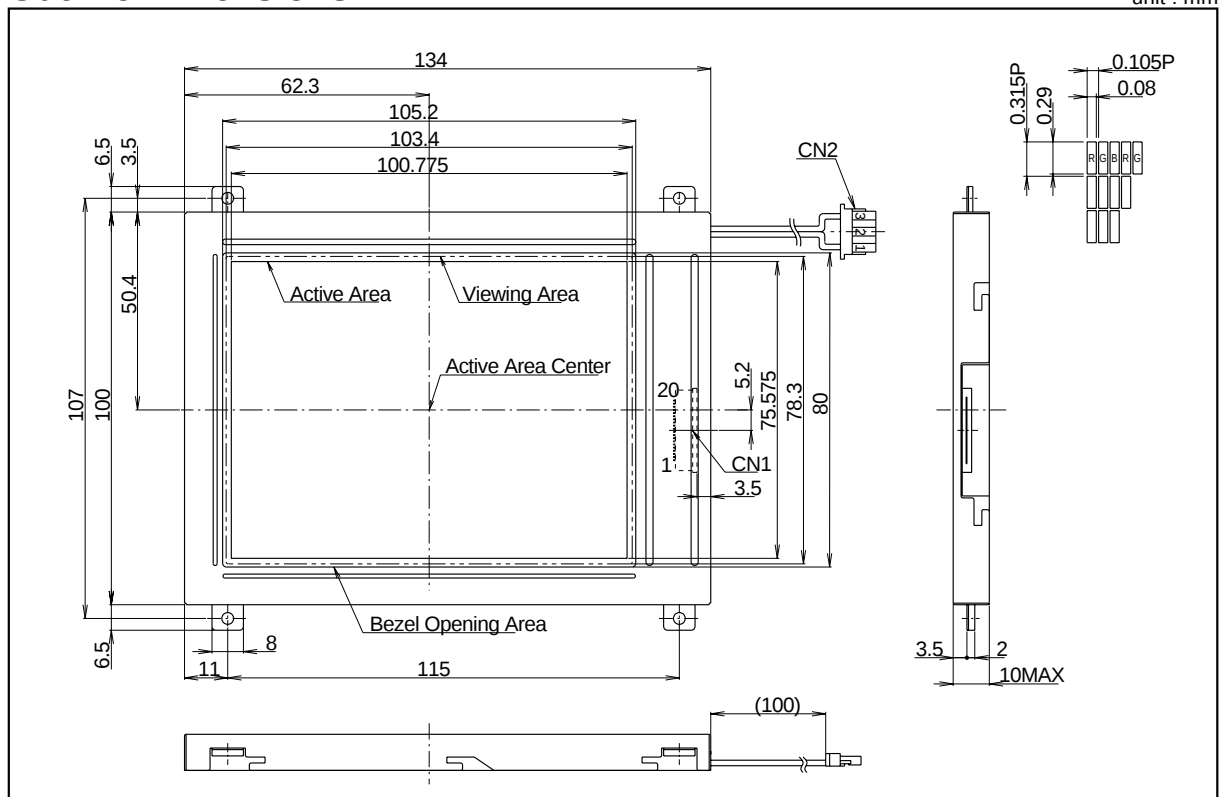
*1...Triple Super Twisted Nematic

*2...() value ... Including mounting tabs.

Parameter		Unit
Backlight type	1CCFT(D)	-
Duty ratio	1/240	-
Logic voltage	5.0 Vcon	V
Power consumption	3 210	mW
Outline dimensions (W x H x D)	134.0 x 100.0(113.0)*2 x 10	mm
Weight	150	g
Operating temperature	0 to +60	°C
Storage temperature	-25 to +65	°C

Outline Dimensions

unit : mm



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Interface signals

(LCD)

No.	Symbols	Description	Note
1	YD	Scan start-up signal	"H"
2	LP	Input latch signal	"H"→"L"
3	VSS	Ground potential	
4	XCK	Data input clock signal	"H"→"L"
5	VSS	Ground potential	
6	NC	No connect	OPEN
7	DISP	Display control signal	"H" display on, "L" display off
8	VDD	Power supply for logic (+5V)	
9	VEE	Power supply for LCD (+30V)	
10	VSS	Ground potential	
11	D0	Display data signal	"H"(ON), "L"(OFF)
12	D1		
13	D2		
14	D3		
15	D4		
16	D5		
17	D6		
18	D7		
19	VSS	Ground potential	
20	VSS	Ground potential	

Electrical characteristics

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply voltage (Logic)	Vdd-Vss	Ta=0~60°C	4.75	5.0	5.25	V
Supply voltage(LCD) (Note 1)	Vee-Vss	Ta=0°C	—	26	28.6	V
		Ta=25°C	—	24.7	—	
		Ta=60°C	20.7	23	—	
Input signal voltage	Vih	"H"level Ta=0~60°C	0.8Vdd	—	Vdd	V
	Vil	"L"level	0	—	0.2Vdd	V
Supply current	Idd	Ta=25°C(Note 2)	—	3.0	5.0	mA
	Iee		—	12.0	15.0	mA
Power consumption	Pd	Ta=25°C(Note 3)	—	310	400	mW

(Note 1) Frame frequency=180Hz

(Note 2) Frame frequency=180Hz,Vee-Vss=30V,Vdd=5V

(Note 3) Except Lamp power consumption