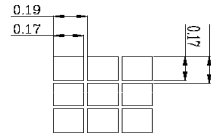


PIN CONNECTION

NO.	SYMBOL	NO.	SYMBOL
1	CS1B	17	VDD
2	RESETB	18	VOUT
3	RS	19	C3+
4	RW/WR	20	C3-
5	E/RD	21	C1+
6	DB0	22	C1-
7	DB1	23	C2+
8	DB2	24	C2-
9	DB3	25	VR
10	DB4	26	V0
11	DB5	27	V1
12	DB6	28	V2
13	DB7	29	V3
14	MI	30	V4
15	PS	31	INTRS
16	VSS	32	NC



DETAIL: DOTS
SCALE: 20X

- NOTES:
1. DISPLAY TYPE: FSTN/BLACK-WHITE
 2. VIEW DIRECTION: 6 O'CLOCK
 3. POLARIZER TYPE: TRANSPARENT/POSITIVE
 4. DRIVE METHOD: 1/64DUTY 1/981AS
 5. LCD DRIVING VOLTAGE: 3.2V
 6. LOGIC SUPPLY VOLTAGE: 3.0V
 7. OPERATING TEMP.: -10°C~+60°C
 8. STORAGE TEMP.: -20°C~+70°C
 9. CONTROLLER IC: S8B113A11-BOCZ
 10. CONNECTOR TYPE: FPC
 11. BACKLIGHT: EL/INDIGO-BLUE
CONDITION: 150Vrms 300Hz
BRIGHTNESS: >30cd/m²(WITHOUT LCD)

FEATURE

1. TAB TYPE , TN, Positive, Reflective/Display dot: Blue/Background: Gray
2. IC: KS0713TB-01
3. 1/64 Duty, 1/9 Bias, 6 O'clock
4. Backlight: NA

Pin NO	Symbol	Pin NO	Symbol	Pin NO	Symbol
1	NC	25	TEST1	49	V2
2	FRS	26	TEST2	50	V3
3	M	27	VCC	51	V4
4	CL	28	DUTY0	52	VSS
5	DIPS	29	DUTY1	53	BSTS
6	VSS	30	VSS	54	DCDC5B
7	CS1B	31	MS	55	VDD
8	CS2	32	CLS	56	HPM
9	VCC	33	VCC	57	INTRS
10	RESEB	34	MI	58	VSS
11	RS	35	PS	59	TEMPS
12	VSS	36	VSS	60	VDD
13	RW_WR	37	VCC	61	NC
14	E_RD	38	VOUT		
15	VDD	39	C3+		
16	DB0	40	C3-		
17	DB1	41	C1+		
18	DB2	42	C1-		
19	DB3	43	C2+		
20	DB4	44	C2-		
21	DB5	45	VSS		
22	DB6	46	VR		
23	DB7	47	V0		
24	VSS	48	V1		

MECHANICAL DATA		
Item	Standard Value	Unit
Module Dimension	58.0(W) X 68(H) X 2.2 (T)	mm
Viewing Area	54.0(W) X 31.0(H)	mm
Mounting hole	0.34 X 0.38	mm
Dot Pitch	0.37 X 0.41	mm

ABSOLUTE MAXIMUM RATING					
Item	Symbol	Standard Value			Unit
		min	typ	max	
Logic Power Supply	VDD-VSS	2.4	3.3	5.5	V
LCD Drive Volyage	Vo-VSS		9.4		V

ELECTRONICAL CHARACTERISTICS						
Item	Symbol	Condition	Standard Value			Unit
			min	typ	max	
Supply Voltage for Logic	VDD	25°C	-0.3		7.0	V
SUPPLY Voltage For LCD Drive t	IDD	25°C	0.3		17.0	V
Input Voltage	VIN	25°C	-0.3		VDD+0.3	V
Current Consumption	ID	25°C			2	mA
Operating Temp	Top	25°C	0		50	°C
Storage Temp	Tst	25°C	-10		60	°C