

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	01/06/18	A.CH	NEW RELEASE

PINS ASSIGNMENT

NO.	SYMBOL	DESCRIPTION
1	VSS	GROUND
2	VDD	POWER SUPPLY FOR LOGIC AND LCD
3	V0	OPERATING VOLTAGE FOR LCD
4	RS	DATA/INSTRUCTION SELECT
5	R/W	READ/WRITE SELECT
6	E	ENABLE SIGNAL
7-14	DB0-DB7	DATA BUS
15	CS1	CHIP SELECT OF IC1 (HIGH EFFECTIVE)
16	CS2	CHIP SELECT OF IC2 (HIGH EFFECTIVE)
17	/RST	RESET SIGNAL(LOW EFFECTIVE)
18	VEE	NEGATIVE VOLTAGE OUTPUT/INPUT
19	A	POWER SUPPLY FOR LED BACKLIGHT(+)
20	K	POWER SUPPLY FOR LED BACKLIGHT(-)

ABSOLUTE MAXIMUM RATING

ITEM	SYMBOL	MIN	MAX	UNIT
POWER SUPPLY(LOGIC)	VDD-VSS	0	6.5	V
POWER SUPPLY(LCD DRV.)	VDD-V0	0	18.0	V
INPUT VOLTAGE	V _i	V _i	VDD	V

ELECTRICAL CHARACTERISTICS

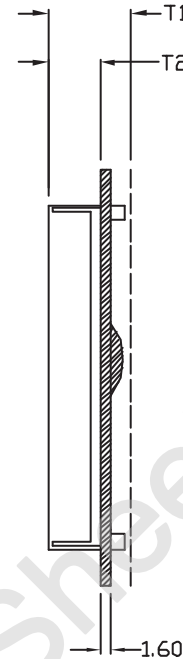
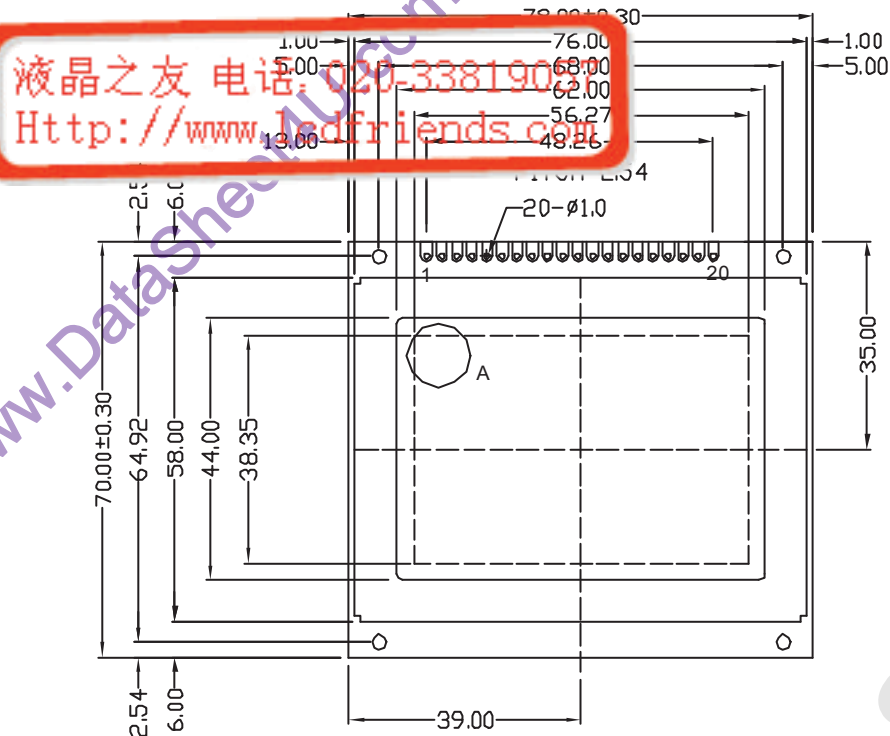
ITEM	SYMBOL	MIN	TYP	MAX	UNIT
VOLTAGE FOR LOGIC	VDD-VSS	4.75	5.0	5.25	V
SUPPLY CURRENT	IDD	-	5.1	9.8	mA
LCD OPERATING VOLTAGE	0C	-	9.2	-	V
	25C	-	9.0	-	V
	40C	-	8.8	-	V
INPUT VOLTAGE	H V _{ih}	0.7VDD	-	VDD	V
	L V _{il}	0	-	0.3VDD	V

MECHANICAL SPECIFICATIONS

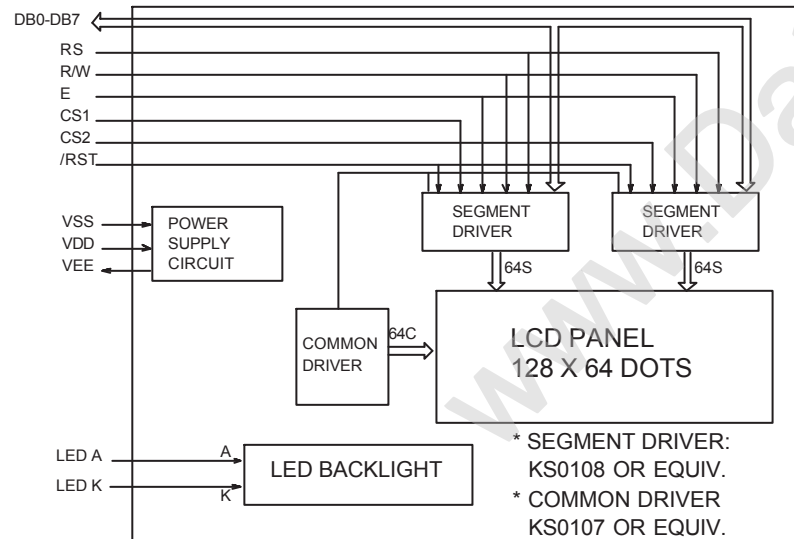
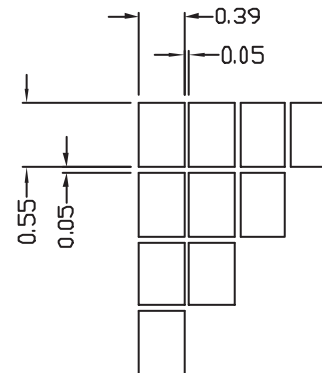
ITEM	SPECIFICATION	UNIT
OVERALL SIZE	78.0W x 70.0H x 14.0T(11.0T)	MM
VIEWING AREA	62.0W x 44.0H	MM
DOT NUMBER	128 x 64	DOTS
DOT SIZE	0.39W x 0.55H	MM
DOT PITCH	0.44W x 0.60H	MM

OPTIONS

- LCD TYPE: Y/G STN; GRAY STN; B/W FSTN
- BACKLIGHT: WITHOUT BACKLIGHT; LED; EL
- COLOR OF BACKLIGHT: Y/G; BLUE; WHITE
- TEMPERATURE RANGE: NORMAL(0-50C); EXTENDED(20-70C)
- POWER SUPPLY: ON BOARD DC/DC(SINGLE 5.0V); DUAL POWER SUPPLY(5.0V & -5.0V)
- VIEWING ANGLE: 6H; 12H



* FOR LED BACKLIGHT
T1=14.0MAX T2=9.0±0.3
* FOR EL OR NO BACKLIGHT
T1=11.0MAX T2=6.0±0.3



* SEGMENT DRIVER:
KS0108 OR EQUIV.
* COMMON DRIVER
KS0107 OR EQUIV.