

**■ CHARACTERISTICS:**

DISPLAY CONTENT: 128 × 64 DOTS

LCD TYPE: STN Y/G、STN BLUE、STN GREY

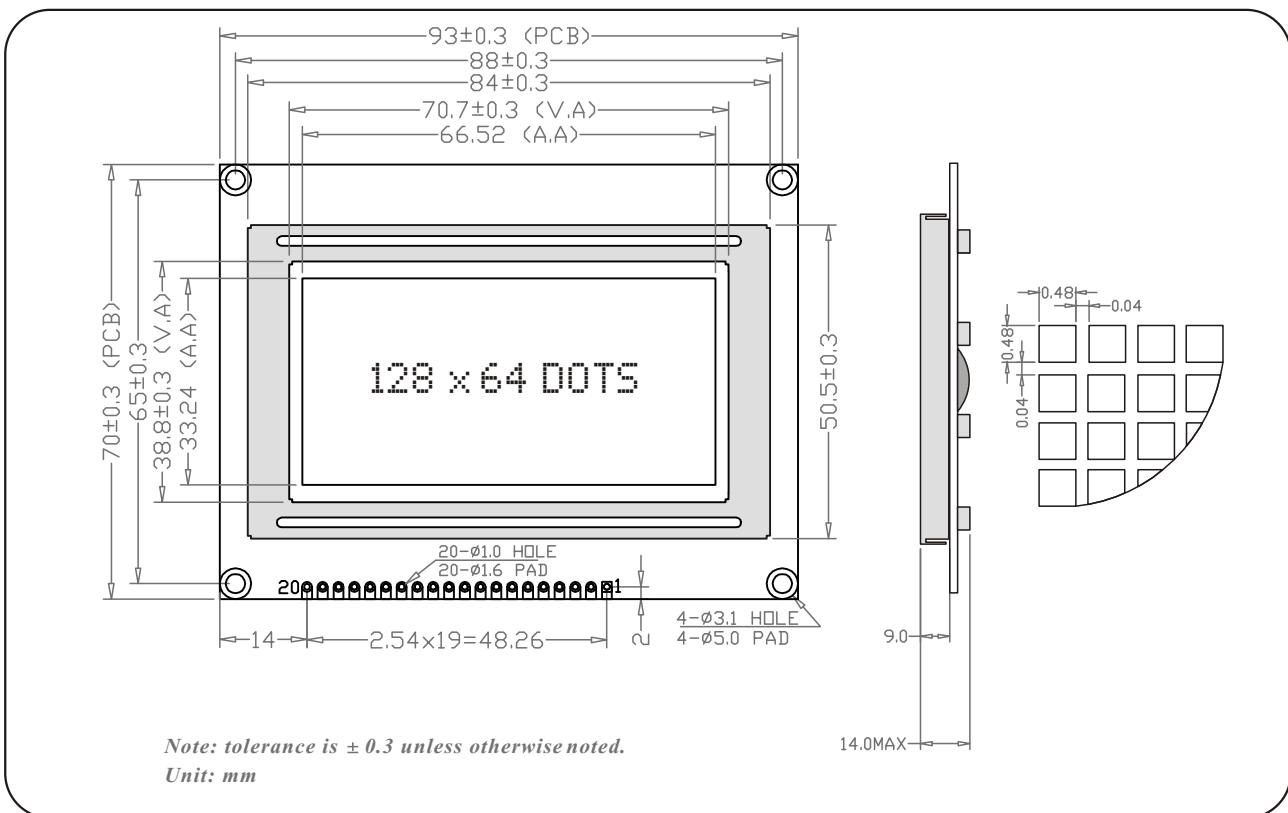
LED BACKLIGHT: Y/G、WHITE

CONTROLLER: KS0108 OR EQUAL

OPERATING TEMPERATURE: NORMAL(0–50°C); WIDE(-20–70°C)

POWER SUPPLY: 5.0V

VIEWING ANGLE: 6H; 12H

**■ DIMENSIONS/DISPLAY CONTENT****■ PIN CONFIGURATION**

1	2	3	4	5	6	7	8	9	10
Vss	VDD	V <sub>0</sub>	D/I	R/W	E	DB0	DB1	DB2	DB3
11	12	13	14	15	16	17	18	19	20
DB4	DB5	DB6	DB7	CS1	CS2	RST	V <sub>EE</sub>	LEDA	LEDK

**■ ELECTRONIC PARAMETER**

Parameter		Symbol	Standard Values			Unit
			Min.	Typ.	Max	
Voltage	Logic	V <sub>DD</sub> -V <sub>SS</sub>	4.75	5.0	5.25	V
	LCD	V <sub>DD</sub> -V <sub>0</sub>	4.5	13	17	V
Current	Logic	I <sub>DD</sub>	-	2.5	-	mA
	LCD	I <sub>EE</sub>	-	2.0	-	mA
LCD Drive Voltage(25°C)			-	13	-	V
Input Voltage	H	V <sub>IH</sub>	0.7V <sub>DD</sub>	-	V <sub>DD</sub>	V
	L	V <sub>IL</sub>	0	-	0.3V <sub>DD</sub>	V

**■ LIMIT PARAMETER (Ta=25°C)**

Parameter	Symbol	Standard Values		Unit
		Min.	Max	
Supply Voltage	V <sub>DD</sub> -V <sub>SS</sub>	0	7.0	
LCD Voltage	V <sub>DD</sub> -V <sub>0</sub>	0	17	
Input Voltage	V <sub>1</sub>	0	V <sub>DD</sub>	V

**■ APPLICATION CIRCUIT**