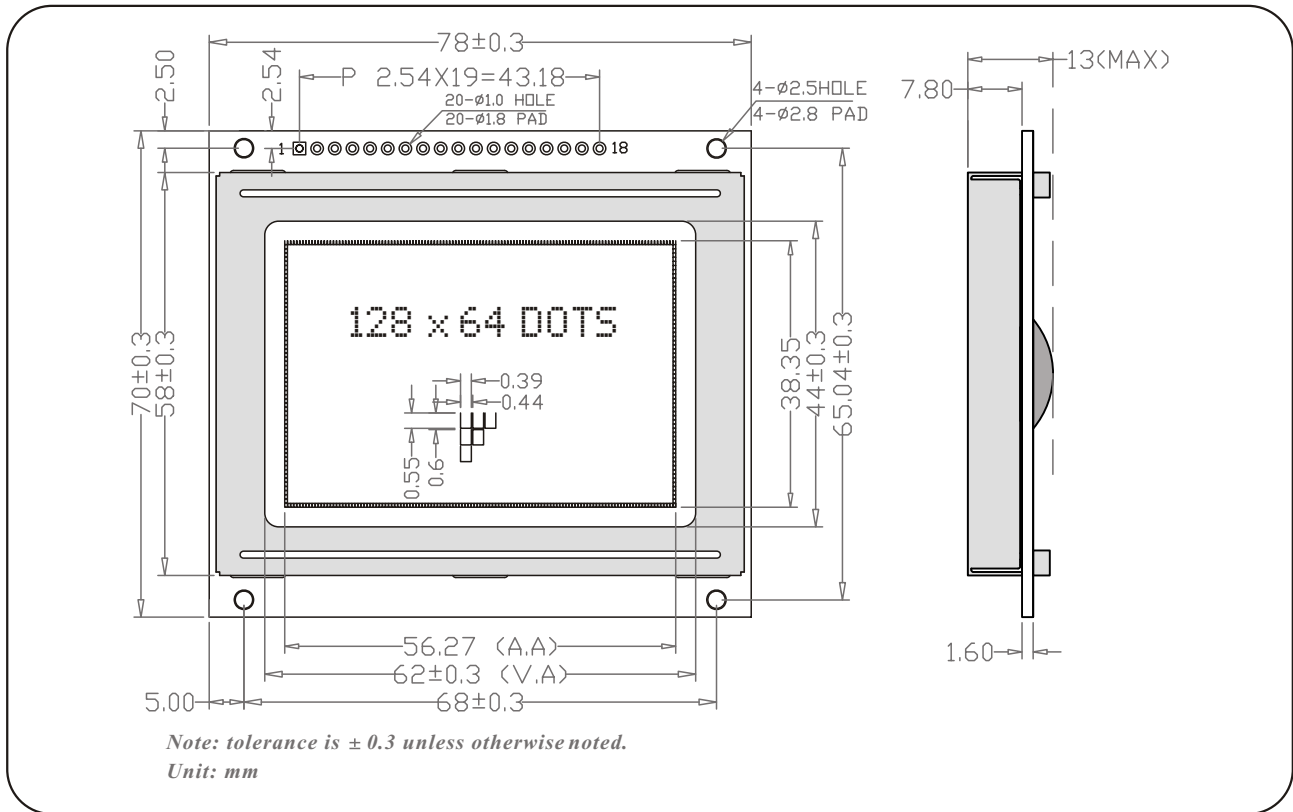


## CHARACTERISTICS:

DISPLAY CONTENT: 128 × 64 DOTS  
 LCD TYPE: STN Y/G  
 LED BACKLIGHT: Y/G  
 CONTROLLER: T6963C 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
FG	GND	VDD	V <sub>0</sub>	/WR	/RD	/CE	/C/D	/RST	DB0
11	12	13	14	15	16	17	18	19	20
DB1	DB2	DB3	DB4	DB5	DB6	DB7	FS	LEDA	LEDK

## LIMIT PARAMETER (Ta=25°C)

Parameter	Symbol	Standard Values		Unit
		Min.	Max	
Supply Voltage	VDD-VSS	0	7.0	V
LCD Voltage	VDD-V <sub>0</sub>	0	30	
Input Voltage	V <sub>1</sub>	0	VDD	

## ELECTRONIC PARAMETER

Parameter	Symbol	Standard Values	Standard Values			Unit
			Min.	Typ.	Max	
Voltage	Logic	VDD-VSS	4.75	5.0	5.25	V
	LCD	VDD-V <sub>0</sub>	0	9.0	30	V
Current	Logic	I <sub>DD</sub>	-	2.5	-	mA
	LCD	I <sub>EE</sub>	-	2.0	-	mA
LCD Drive Voltage(25°C)			-	9.0	-	V
Input Voltage	H	V <sub>IH</sub>	0.7VDD	-	VDD	V
	L	V <sub>IL</sub>	0	-	0.3VDD	V

## APPLICATION CIRCUIT

