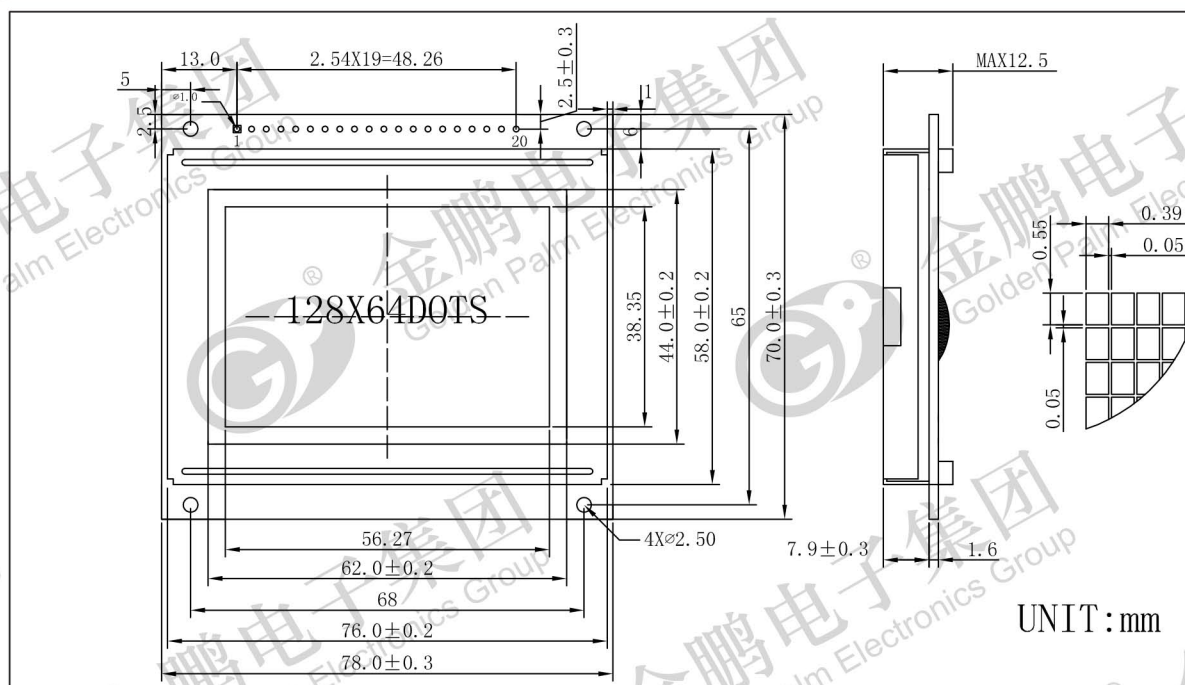




ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage(Logic)	V _{DD}	-0.3	7.0	V
Supply Voltage(LCD)	V _O	VDD-19	VDD+0.3	V
Input Voltage	V _I	0	V _{DD}	V
Operating Temp.	T _{opr}	-20	70	°C
Storage Temp.	T _{stg}	-30	80	°C

MECHANICAL DATA

Item	Nominal Dimensions	Unit
Module Size(W X H X T)	78.0 X 70.0 X 12.5	mm
Viewing Area(W X H)	62.0 X 44.0	mm
Dot Pitch(W X H)	0.44 X 0.60	mm
Dot Size(W X H)	0.39 X 0.55	mm

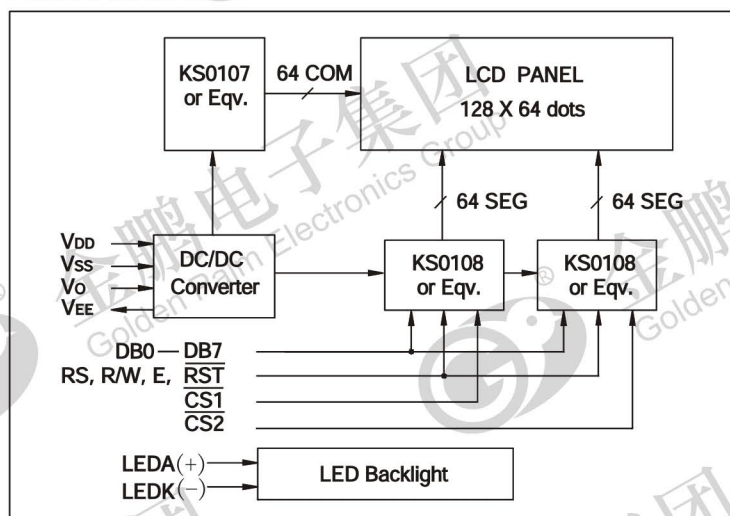
ELECTRICAL CHARACTERISTICS (VDD=5V±0.25V)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input High Voltage	V_{IH}	--	0.7 V_{DD}	--	V_{DD}	V
Input Low Voltage	V_{IL}	--	V_{SS}	--	0.3 V_{DD}	V
Output High Voltage	V_{OH}	$I_{OH} = -200\mu A$	2.4	--	--	V
Output Low Voltage	V_{OL}	$I_{OL} = 1.6mA$	--	--	0.4	V
Supply Current	I_{DD}	$V_{DD} = 5.0 V$	--	1	1.5	mA
LCD Driving Voltage	V_{DD-Vo}	$T_a = 25^{\circ}C$	--	4.5	5.0	V

PIN CONNECTIONS

Pin	Symbol	Level	Function
1	CS1	L	Chip Selection for IC1
2	CS2	L	Chip Selection for IC2
3	Vss	--	GND (0V)
4	VDD	--	Supply Voltage for Logic(+5V)
5	Vo	--	Supply Voltage for LCD
6	RS	H/L	H : Data L : Instruction Code
7	R/W	H/L	H Read L Write
8	E	H	Enable Signal
9	DB0	H/L	Data Bus Line
10	DB1	H/L	
11	DB2	H/L	
12	DB3	H/L	
13	DB4	H/L	
14	DB5	H/L	
15	DB6	H/L	
16	DB7	H/L	
17	RESET	L	Reset Signal,Active Low
18	VEE	--	Negative Voltage Output(-10V)
19	LED+	--	LED Backlight Power Supply
20	LED-	--	

BLOCK DIAGRAM



LED BACKLIGHT SPECIFICATIONS (Ta=25 °C)

Item	Symbol	Typ.	Max.	Unit
Forward Voltage	V_f	4.1	4.3	V
Forward Current	I_f	110	--	mA
Emission Wave Length	λ_p	568	--	nm