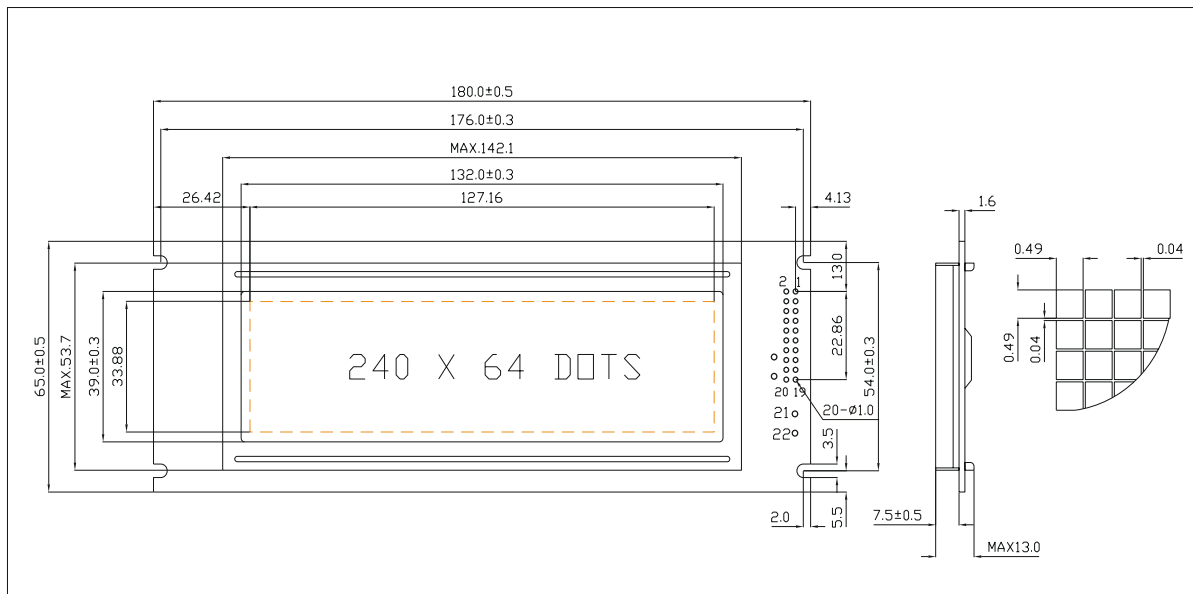


GTG-240645

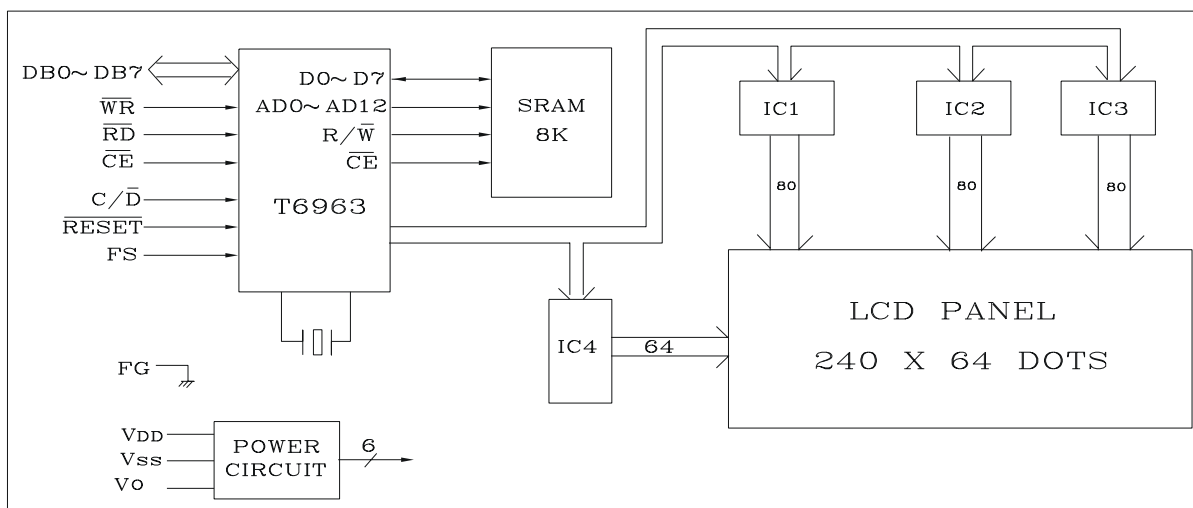
(240 x 64 dots)

1/64 DUTY, 1/9 BIAS

1.0 DIMENSIONAL DRAWING



2.0 BLOCK DIAGRAM



3.0 MECHANICAL SPECIFICATIONS

Item	Nominal Dimensions	Unit
Module Size(WxHxT)	180.0 X 65.0 X 10.0	mm
Viewing Area(WxH)	132.0 X 39.0	mm
Dots x Dots(WxH)	240 X 64	dots
Dot Pitch(WxH)	0.53 X 0.53	mm
Dot Size(WxH)	0.49 X 0.49	mm

4.0 ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Test Condition	Standard Value		Unit
			Min.	Max.	
Supply Voltage for Logic	VDD-VSS	Ta=25°C	-0.3	7.0	V
Supply Voltage for LCD	VDD-Vo		-	28	V
Input Voltage	VI		-0.3	VDD+0.3	V
Operating Temperature	Topr	—	-20	70	°C
Storage Temperature	Tstg	—	-30	80	°C

5.0 ELECTRICAL CHARACTERISTICS(Ta=25°C,VDD=5.0±0.25V)

Item		Symbol	Test Condition	Standard Value			Unit
				Min.	Typ.	Max.	
Supply Voltage for	Logic	VDD-VSS	—	4.5	5.0	5.5	V
	LCD	VDD-Vo	—	8	—	26	V
Supply Current for	Logic	IDD	—	—	—	20	mA
	LCD	IEE	—	—	—	20	mA
Operating Voltage for LCD (Recommended)		VDD-Vo	Ta=25°C	—	12.0	—	V
Input Voltage	'H'Level	VIH	High Level	VDD-2.2	—	VDD	V
	'L'Level	VIL	Low Level	0	—	0.8	V

6.0 INTERFACE PIN CONNECTIONS

Pin No	Symbol	Level	Description
1	FG	—	Frame Ground
2	Vss	—	Ground
3	VDD	—	Power supply for logic circuit
4	vo	—	Operating voltage for LCD driving
5	$\overline{\text{WR}}$	L	Command and data write signal
6	$\overline{\text{RD}}$	L	Data and status read signal
7	$\overline{\text{CE}}$	L	Chip enable signal
8	C/ $\overline{\text{D}}$	H/L	Write: H-Command write, L-Data write Read: H-Status read, L-Data read
9	NC	—	No connection
10	$\overline{\text{RESET}}$	L	Reset signal
11~18	DB0~DB7	H/L	Data bus
19	FS	H/L	Font selection H: 6 X 8 Dots, L: 8 X 8 Dots
20	NC	—	No connection