



SG320240F (320 DOTS X 240 DOTS)

FEATURES

- NO BUILT-IN CONTROLLER
- 3.3V / 5.0V POWER SUPPLY
- 1/240 DUTY CYCLE
- 4-BIT PARALLEL INTERFACE
- COG PROCESS

MECHANICAL DATA

ITEM	DIMENSIONS	UNIT
Module Size (W x H x T)	160.0 x 109.0 x 12.9	mm
Viewing Area (W x H)	121.0 x 92.0	mm
Active Area (W x H)	115.17 x 86.37	mm
Dot Size (W x H)	0.345 x 0.345	mm
Dot Pitch (W x H)	0.36 x 0.36	mm

INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1	D0	H/L	Data Bus Line
2	D1	H/L	Data Bus Line
3	D2	H/L	Data Bus Line
4	D3	H/L	Data Bus Line
5	DispOFF	-	Display OFF .Active LOW
6	FRM	H/L	Frame start signal
7	NC	-	No Connection
8	CL1	-	Common driver data shift signal
9	CL2	-	Clock pulse for segment shift register
10	VDD	5V	Power Supply Voltage
11	VSS	0V	Power Supply Ground
12	VEE	-	Negative power supply voltage
13	Vo	-	Power supply for LCD panel
14	FGND	-	Frame ground

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Supply Voltage For Logic	V _{DD} -V _{SS}	0	-	7	V
Supply Voltage For LCD Drive	V _{DD} -V _o	0	-	30	V
Input Voltage	V _I	V _{SS}	-	V _{DD}	V

ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT	
Supply Voltage For Logic	V _{DD} -V _{SS}	-	4.5	5	5.5	V	
LCD Supply Voltage	V _{DD} -V _o	V _{DD} =5V Ta=25	22.4	23.5	24.3	V	
Supply Current	I _{DD}	V _{DD} =5V	-	16	25	mA	
Input Voltage	"HIGH" Level	V _{IH}	-	2.2	-	V _{DD}	V
	"LOW" Level	V _{IL}	-	-	-	0.6	V
Output Voltage	"HIGH" Level	V _{OH}	-	2.4	-	V	
	"LOW" Level	V _{OL}	-	-	-	0.4	V

EXTERNAL DIMENSIONS

