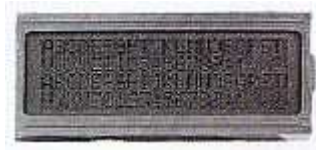


DG-12232

□ 122 x 32 dots

□ STN Reflective/EL Backlight



□ 1/32 Duty,

MECHANICAL DATA

Item	Dimension	Unit
Module Size	65.1(W) x 27.1(H) x 5.9(T)	mm
View Area	60.5(W) x 18.5(H)	mm
Dot Size	0.4 x 0.45	mm
Dot Pitch	0.44 x 0.49	Mm

ABSOLUTELY MAXIMUM RATINGS

Item	Symbol	Standard Value			Unit
		Min	Typ.	Max.	
Supply Voltage for Logic	$V_{DD} - V_{SS}$	--	--	8.0	V
Supply Voltage for LCD Drive	$V_{DD} - V_{EE}$	--	--	16.5	V
Input Voltage	V_I	$V_{SS}-0.3$	--	$V_{DD}+0.$	V

PIN FUNCTIONS

Pin No.	Symbol	Level	Function
1	A0	H/L	L - Instruction, H - Data
2	CS2	L	Chip Enable Active "L"
3	CS1	L	Chip Enable Active "L"
4	CL	H/L	External Clock (2KHz)
5	/RD(E)		/RD for 80 Serial, E for 68 Serial
6	/WR(R/W)		/WR for 80 Series, R/W for 68 Series
7	Vss		Ground
8~15	DB0~DB7	H/L	Data Bus Line
16	VDD		Power Supply for Logic Circuit
17	Res	H/L	H - 68 Serial L - 80 Serial
18	VEE		Power Supply for LCD

ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Logic circuit Power Supply Voltage	$V_{DD}-V_{SS}$	--	4.5	5.0	5.5	V
LCD Driver Circuit Power Supply Voltage	$V_{DD}-V_{EE}$	--	--	6.4	--	V
Input Voltage	V_{IH}	--	$V_{SS}+2.0$	--	V_{DD}	V
Input Voltage	V_{IL}	--	V_{SS}	--	$V_{SS}+0.8$	V
Output Voltage	V_{OH}	$I_{OH}=-3.0mA$	$V_{SS}+2.4$	--	--	V
Output Voltage	I_{OH}	$I_{OL}=+3.0mA$	--	--	$V_{SS}+0.4$	V
Input Leakage Current	I_{LI}	--	-1	--	+1	A
Supply Current	I_{DD}	$V_{DD}-V_{SS}=5.0V$	--	0.6	1.1	mA
EL Backlite Current	I_{EL}	$V_{DD}-V_{SS}=5.0V$	--	0.12/CM	--	mA