

# DG-12864 128x 64dots 1/64 Duty STN Reflective/EL/LED Backlight

MECHANICAL DATA		
Item	Dimension	Unit
Module Size	93.0(W) x 70.0(H) x 9.5(T)	mm
View Area	71.7(W) x 39.0(H)	mm
Dot Size	0.48 x 0.48	mm
Dot Pitch	0.52 x 0.52	mm

ABSOLUTELY MAXIMUM RATINGS					
Item	Symbol	Standard Value			Unit
		Min	Typ.	Max.	
Supply Voltage for Logic	$V_{DD}-V_{SS}$	0	--	7.0	V
Supply Voltage for LCD Drive	$V_{DD}-V_{EE}$	0	--	19.0	V
Input Voltage	$V_I$	$V_{SS}$		$V_{DD}$	V

PIN FUNCTIONS			
Pin No.	Symbol	Level	Function
1	$V_{SS}$		Ground
2	$V_{DD}$		Power Supply for Logic Circuit
3	$V_0$		Power Supply for LCD Driving
4	D/I	H/L	H: Data Input L: Instruction Code Input
5	R/W	H/L	H: Data Read (LCD Module $\Rightarrow$ MPU) L: Data Write (LCD Module $\Leftarrow$ MPU)
6	E	H, H $\rightarrow$ L	Enable Signal
7-14	DB0-DB7	H/L	Data Bus Line
15	CS1	H	Chip Selection for IC1
16	CS2	H	Chip Selection for IC2
17	RST	L	Reset
18	$V_{EE}$		Negative Voltage Output (-10V)
19-20	N.C.		

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	$V_{DD}-V_{EE}$	--	--	12.6	--	V
Input Voltage	$V_{BI}$	Note (1)	$0.7 \times V_{DD}$	--	$V_{DD}$	V
Input Voltage	$V_{IL}$	Note (1)	$V_{SS}$	--	$0.3 \times V_{DD}$	V
Supply Current (Logic)	$I_{DD}$	$V_{DD}=5.0V$	--	1.0	3.0	mA
Supply Current (LCD)	$I_{LCD}$	$V_{DD}=5.0V$	--	1.0	3.0	mA

Note (1) CS1, CS2, R/W, D/I, DB0-DB7, E, RST

