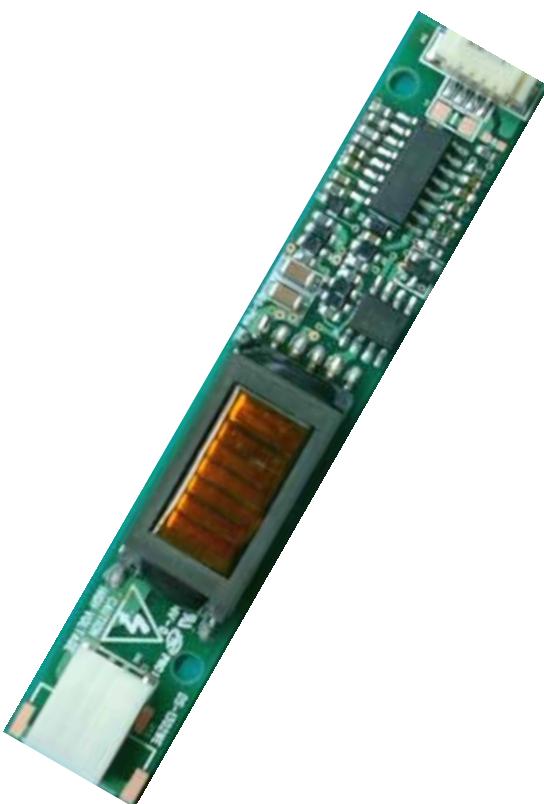


## **DS-1302WE(Vtg)**



### **Features**

- Drive 1-lamp
- Wide input voltage operation
- Accurate and stable output current regulation
- Long lamp life with soft start
- Low sleep current
- Voltage Dimming control  
; no influence to power ripple
- Protection against lamp open or failure
- High efficiency
- Low EMI and spurious noise

### **Applications**

- 3.8~14.1" Desktop LCD monitor
- Industrial LCD panel

### **Electrical characteristics**

Parameter	Symbol	Conditions*	Specification			Unit
			Min	Typ	Max	
Input supply voltage	$V_{IN}$		10.8	12.0	13.2	V
Input current	$I_{IN}$	$V_{IN}=12V, V_{BRT}=0V$	0.30	0.40	0.50	A
Full bright lamp current	$I_{O(MAX)}$	$V_{IN}=12V, V_{BRT}=0V$	5.0	6.0	7.0	mArms
Minimum lamp current	$I_{O(MIN)}$	$V_{IN}=12V, V_{BRT}=5.0V$	1.5	2.5	3.5	mArms
Operating frequency	$F_O$	$V_{IN}=12V, V_{BRT}=0V$	43	48	53	KHz
Dimming ratio(Vtg-dim)		$V_{IN}=12V, V_{BRT}=0 \text{ to } 5.0V$		2 :1		
Sleep current	$I_{SLEEP}$	$V_{IN}=12V, V_{SLEEP}=0V$			10	mA
Efficiency		$V_{IN}=12V, V_{BRT}=0V$	80	88		%

\* At the reference 9"(FG09011DNCWAGT1) of Data image LCD Panel

**DS-Plus Inc./ ( )**

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Tel : 82-31-608-7100~3, Fax : 82-31-608-7104

**Absolute maximum ratings**

Input supply voltage ( $V_{IN}$ )	-	-	-	-0.3V to 14V
Output current ( $I_O$ )	-	-	-	8.0mArms
Output power	-	-	-	5.0W
Sleep & Bright adjust signal voltage ( $V_{SLEEP}$ , $V_{BRT}$ )	-	-	-	-0.3V to $V_{IN}$
Ambient operating temperature	-	-	-	0 °C to 50 °C
Storage temperature range	-	-	-	-30 °C to 80 °C
Operating & storage humidity	-	-	-	10 % to 85 %

**Recommended operating conditions (R.C.)**

Parameter	Symbol	Recommendation			Units
		Min	R.C.	Max	
Input supply voltage	$V_{IN}$	10.8	12.0	13.2	V
Full bright lamp current	$I_O(MAX)$	5.5	6.0	6.5	mArms
Brightness control voltage range	$V_{BRT}$	0		5.0	V
Lamp on/off control voltage	$V_{SLEEP}$	3.0	5.0	7.0	V
Lamp operating voltage	$V_O$		648		Vrms
Operating ambient temperature range	$T_A$	0		50	°C

**Connector and functional pin description**

CN1 Connector : 12505WR - 04A00 (YEONHO or Equivalent)

CN1 - 1  $V_{IN}$  (Input power supply)

CN1 - 2  $G_{ND}$  (Power supply return)

CN1 - 3  $V_{SLEEP}$  (Lamp On/Off control ; Off at Low, On at High)

CN1 - 4  $V_{BRT}$  (Bright adjust ; 0 to 5.0V)

CN2 Connector (Option) : 35001WR - 02A00 (YEONHO or Equivalent)

or 20015WR - 05A00 (YEONHO or Equivalent)

CN2 - 1 High voltage

CN2 - 2 Lamp current return

**Mechanical dimensions**