

# DS-101WJIG

## Features

- Drive 1 lamp
- Nominal current 8.0 mArms for lamp
- LED Indication of lamp operation or failure
- 15 V input voltage
- Accurate and stable output current regulation
- Protection against lamp open or failure
- Protection against lamp connector misconnections
- No failure on the output shortage condition
- Long lamp life with soft start
- High efficiency

## Applications

- Universal LCD module test jig

## Electrical characteristics

Parameter	Symbol	Conditions*	Specification*			Unit
			Min	Typ	Max	
Input supply voltage	$V_{IN}$		13.5	15.0	16.5	V
Input current	$I_{IN}$	$V_{IN}=15V, V_{BRT}=3.3V$	0.57	0.67	0.77	A
Full bright lamp current	$I_{O(MAX)}$	$V_{IN}=15V, V_{BRT}=3.3V$	7.8	8.4	9.0	mArms
Minimum lamp current	$I_{O(MIN)}$	$V_{IN}=15V, V_{BRT}=1.0V$	4.0	4.8	5.6	mArms
Operating frequency	$F_O$	$V_{IN}=15V, V_{BRT}=3.3V$		63.5		KHz
Open lamp output voltage	$V_O$	Lamp open		0		Vrms
Dimming ratio		$V_{IN}=15V, V_{BRT}=3.3$ to $1.0V$	2 : 1			
Striking time	$T_{scp}$	$V_{IN}=15V, V_{BRT}=3.3V$	0.1	0.5		sec
Efficiency		$V_{IN}=15V, V_{BRT}=3.3V$		80		%

\* At the reference 17.1"LCD-Module(LP171W01) of LG-Philips

**Absolute maximum ratings**

Input supply voltage ( $V_{IN}$ )	-----	-0.3V to 18V
Output voltage, no load	-----	Internally limited to zero volt
Output current ( $I_O$ )	-----	10.0mA rms
Output power	-----	8.0W
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	$V_{IN}$	13.5	15.0	16.5	V
Full bright lamp current	$I_{O(MAX)}$		8.0	8.5	mA rms
Brightness control voltage range	$V_{BRT}$	3.3		1.0	V
Lamp on/off control voltage(ON)	$V_{SLEEP}$	2.0	3.3	5.0	V
Lamp on/off control voltage(OFF)	$V_{SLEEP}$	0		0.6	V
Lamp operating voltage	$V_O$	720	750	920	Vrms

**Connector and functional pin description**

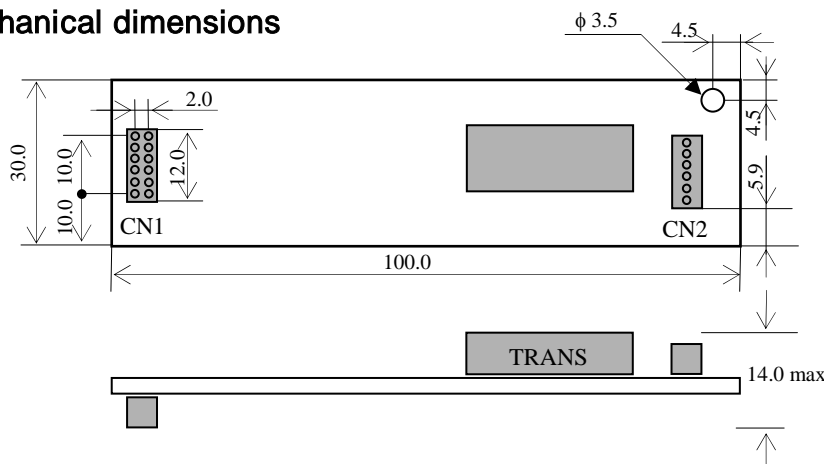
CN1 Connector : TSS 200-12A (Geryoung or equivalent)

- CN1 - 1,2  $V_{IN}$  (DC Input ; 15.0V)
- CN1 - 3,4,11,12  $G_{ND}$  (Power supply return)
- CN1 - 5  $V_{SLEEP}$  (On/Off control ; Off at Low, On at High)
- CN1 - 6  $V_{BRT}$  (Bright adjust ; 3.3 to 1.0V)
- CN1 - 7 SD (Low ; Protection function ON )  
(High ; Protection function OFF)
- CN1 - 8 Lamp status (Lamp on ; 0~0.5V, Lamp off ; 3~6V)
- CN1 - 9 External sync input (65KHz)

CN2 Connector : SMW200-06 (Yeonho or Equivalent)

- CN2 - 1,2 High voltage
- CN2 - 5,6 Lamp current return

**Mechanical dimensions**



Tolerance : ± 0.5  
Unit : mm

Notice : The specification is subject to change without notice