

DS-1302WH (12.0mA)



Features

- Drive 2-lamps
- Nominal current 12.0 mArms for each lamp
- 10.8 to 13.2 V input voltage range
- Accurate and stable output current regulation
- Accommodation to various LCD-module
- Voltage dimming control
; no influence to power ripple
- Protection against lamp open or failure
- Long lamp life with soft start
- High efficiency
- Low EMI and spurious noise

Applications

- 8~15" 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} | $V_{IN}=12V, V_{BRT}=0V$ | 0.5 | 0.75 | 1.0 | A |
| Full bright lamp current | $I_{O(MAX)}$ | $V_{IN}=12V, V_{BRT}=0V$ | 10.0 | 12.0 | 14.0 | mArms |
| Minimum lamp current | $I_{O(MIN)}$ | $V_{IN}=12V, V_{BRT}=5.0V$ | 2.0 | 4.0 | 6.0 | mArms |
| Operating frequency | F_O | $V_{IN}=12V, V_{BRT}=0V$ | 37 | 42 | 47 | KHz |
| Open lamp output voltage | V_O | Lamp open | - | - | 0 | Vrms |
| Dimming ratio(voltage cont) | | $V_{IN}=12V, V_{BRT}=0$ to 5.0V | 2 : 1 | 3 : 1 | | |
| Sleep current | I_{IN} | $V_{IN}=12V, V_{SLEEP}=0V$ | | | 10 | mA |
| Efficiency | | $V_{IN}=12V, V_{BRT}=0V$ | 80 | 88 | | % |
| Striking voltage | V_s | $V_{IN}=12V, V_{BRT}=0V$ | | 1200 | | Vrms |

* At the reference 15"LCD-Module of LG-Philips

DS-Plus Inc./ ()

Absolute maximum ratings

| | | |
|--|-------|---------------------------------|
| Input supply voltage (V_{IN}) | ----- | -0.3V to 13.2V |
| Output voltage, no load | ----- | Internally limited to zero volt |
| Output current (I_O) | ----- | 14.0mArms |
| Output power (per lamp) | ----- | 7.0W |
| 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 % |

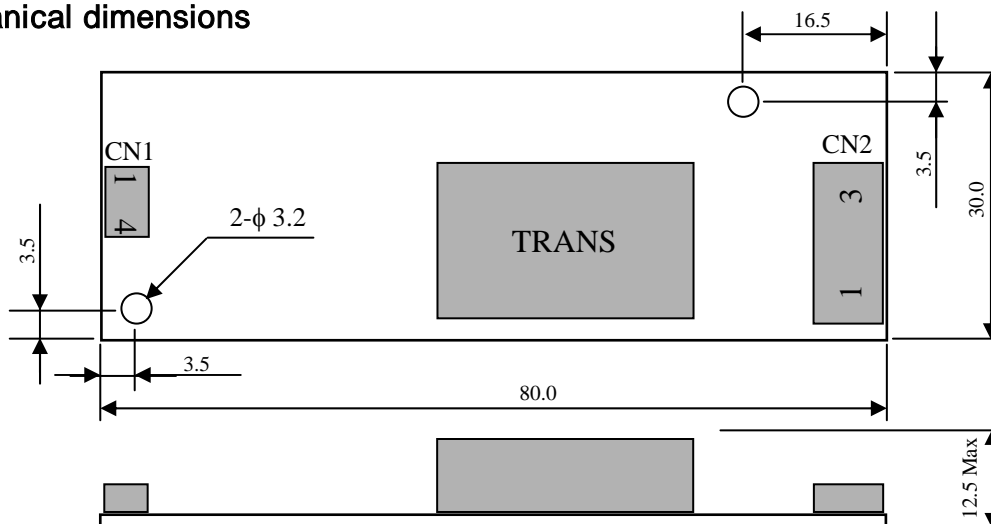
Recommended operating conditions (R.C.)

| Parameter | Symbol | Recommendation | | | Units |
|-------------------------------------|--------------|----------------|------|------|-------|
| | | Min | R.C. | Max | |
| Input supply voltage | V_{IN} | 10.8 | 12.0 | 13.2 | V |
| Full bright lamp current | $I_{O(MAX)}$ | 10.0 | 12.0 | 14.0 | 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 | | 650 | | 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} (DC Input ; 12.0V)
 - 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 : 20015WR-05A01 (YEONHO or Equivalent)
- CN2 -1 Lamp current return
 - CN2 -2 High voltage
 - CN2 -3 High voltage
- Tolerance : ± 0.5
Unit : mm

Mechanical dimensions



Notice : The specification is subject to change without notice