

DS-1305WK



Features

- Drive 2-lamps
- Nominal current 7.5 mArms for each lamp
- 10.8 to 13.2V 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

- 10~19" 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}	$V_{IN}=12V, V_{BRT}=0V$	0.85	1.05	1.25	A
Full bright lamp current	$I_{O(MAX)}$	$V_{IN}=12V, V_{BRT}=0V$	6.5	7.5	8.5	mArms
Minimum lamp current	$I_{O(MIN)}$	$V_{IN}=12V, V_{BRT}=5.0V$	1.6	2.6	3.6	mArms
Operating frequency	F_O	$V_{IN}=12V, V_{BRT}=0V$	45	50	55	KHz
Open lamp output voltage	V_O	1 or more lamp open	-	-	0	Vrms
Dimming ratio		$V_{IN}=12V, V_{BRT}=0$ to 5.0V		3 : 1		
Sleep current	I_{IN}	$V_{IN}=12V, V_{SLEEP}=0V$			10	mA
Efficiency		$V_{IN}=12V, V_{BRT}=0V$	80	88		%

* At the reference 19"LCD-Module(LTM190BT03) of Samsung

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Absolute maximum ratings

Input supply voltage (V_{IN})	-----	-0.3V to 14V
Output voltage, no load	-----	Internally limited to zero volt
Output current (I_O)	-----	10.0mA rms
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	$I_{O(MAX)}$	6.5	7.5	8.5	mA rms
Brightness control voltage range	V_{BRT}	0		5.0	V
Lamp on/off control voltage	V_{SLEEP}		5.0		V
Lamp operating voltage	V_O		700		V rms
Operating ambient temperature range	T_A	0		50	°C

Connector and functional pin description

- CN1 Connector : 12505WR - 10A00 (YEONHO or Equivalent)
 - CN1 - 1 V_{BRT} (Bright adjust ; 0 to 5.0V)
 - CN1 - 2,6 NC
 - CN1 - 3,4,7,8 G_{ND} (Power supply return)
 - CN1 - 5 V_{SLEEP} (Lamp On/Off control ; Off at Low, On at High)
 - CN1 - 9,10 V_{IN} (Input power supply)

- CN2,3 Connector : 20015WR - 05A00 (YEONHO or Equivalent) or 35001WR - 02A00 (YEONHO or Equivalent)
 - CN2,3 - 1 High voltage
 - CN2,3 - 2 Lamp current return

Mechanical dimensions

Tolerance : ± 0.5
Unit : mm

