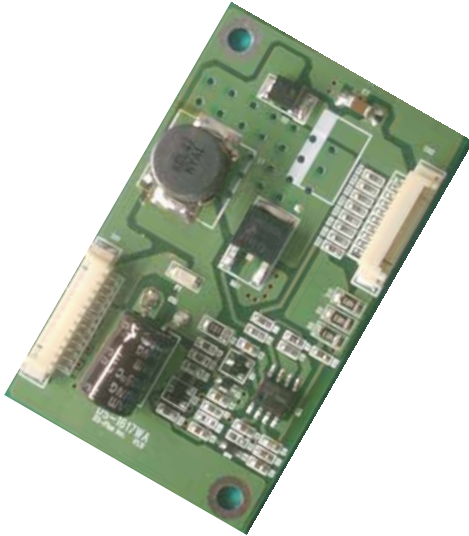


DS-1617WA



Features

- Nominal current 136 mA for LED Back-light
- 10.8 to 13.2 V input voltage range
- Accurate and stable output current regulation
- Analog dimming or External-PWM dimming selectable
- Low EMI and spurious noise
- Built-in Fuse
- Single sided PCB layout

Applications

- 15~22" Wide LED Back-light LCD monitor

Electrical characteristics for Analog dimming

Parameter	Symbol	Conditions*	Specification*			Unit
			Min	Typ	Max	
Input supply voltage	V_{IN}		10.8	12.0	13.2	V
Input current	I_{IN}	$V_{IN}=12V, V_{BRT}=0V$	0.45	0.55	0.65	A
Full bright LED current	$I_{O(MAX)}$	$V_{IN}=12V, V_{BRT}=0V$	116	136	156	mA
Minimum LED current	$I_{O(MIN)}$	$V_{IN}=12V, V_{BRT}=5.0V$	8	18	28	mA
Dimming ratio		$V_{IN}=12V, V_{BRT}=0$ to 5.0V		7 : 1		
Sleep current	I_{IN}	$V_{IN}=12V, V_{SLEEP}=0V$			10	mA

Electrical characteristics for External -PWM dimming

Parameter	Symbol	Conditions*	Specification*			Unit
			Min	Typ	Max	
Input supply voltage	V_{IN}		10.8	12.0	13.2	V
Input current	I_{IN}	$V_{IN}=12V, Duty=0\%$	0.45	0.55	0.65	A
Full bright LED current	$I_{O(MAX)}$	$V_{IN}=12V, Duty=0\%$	116	136	156	mA
Minimum LED current	$I_{O(MIN)}$	$V_{IN}=12V, Duty=80\%$	10	20	30	mA
Dimming ratio		$V_{IN}=12V, Duty=0 \sim 100\%$		100 : 1		
Sleep current	I_{IN}	$V_{IN}=12V, V_{SLEEP}=0V$			10	mA

* At the reference 17.1" LCD Module(LP171W6) of LG Display

DS-Plus Inc./ ()

Room 403, Ssangyong IT twin tower-1, 442-17 Sangdaewon-dong, Jungwon-gu, Seongnam-city 462-807, Korea
Tel : 82-31-608-7100~3, Fax : 82-31-608-7104

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)	-----	500mA
Sleep & Bright adjust signal voltage (V_{SLEEP} , V_{BRT})	----	-0.3V to 10.0V
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.)

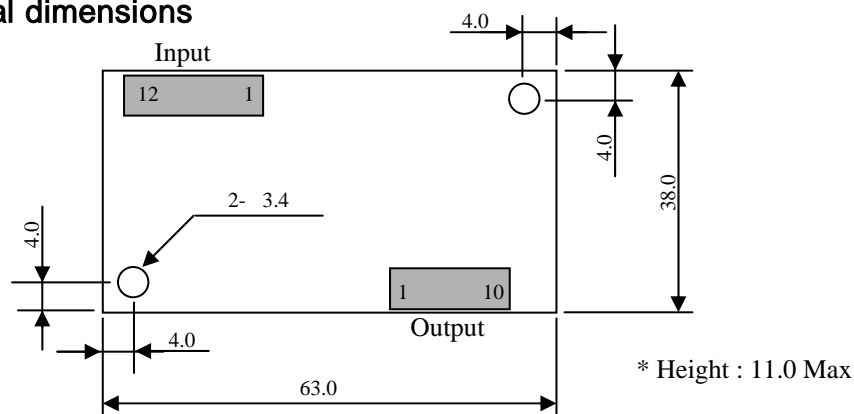
Parameter	Symbol	Recommendation			Units
		Min	R.C.	Max	
Input supply voltage	V_{IN}	10.8	12.0	13.2	V
Full bright LED current	$I_{O(MAX)}$	116	136	156	mA
Brightness control voltage range(Analog dim)	V_{BRT}	5.0		0	V
Brightness control PWM Duty(Ext-PWM dim)	Duty	100		0	%
Lamp on/off control voltage	V_{SLEEP}	3.0	5.0	7.0	V
LED operating voltage(Reference)	V_O		41.0		V
Operating ambient temperature range	T_A	0		40	°C

Connector and functional pin description

- CN1 Connector : 12505WR-12A00(YEONHO or Equivalent)
 - CN1-1,2,3 V_{IN} (DC Input ; 12.0V)
 - CN1-4,5,7,8,10,12 G_{ND} (Power supply return)
 - CN1-9 V_{SLEEP} (Lamp On/Off control ; Off at Low, On at High)
 - CN1-11 V_{BRT}
 - *Analog Dimming-Bright adjust ; 0 to 5.0V Input
 - *External-PWM Dimming-Bright adjust ; 5Vpp, Duty 0 to 100% Square wave Input
 - CN1-6 N.C
- CN2 Connector : 12505WR-10A00 (YEONHO or Equivalent)
 - CN2 -9,10 LED (Anode) Operating voltage
 - CN2 -1,2,3,4,5,6,7,8 LED (Cathode) Current return

Tolerance : ± 0.5
Unit : mm

Mechanical dimensions



Notice : The specification is subject to change without notice