LCD Backlight Driver



12 Volt Input

Dual Tube CCFT Inverter

Brightness Control



Physical Specifications

20mm x 130mm x 14mm (0.787" x 5.12" x 0.551") Dimensions:

Weight: 36g (1.28 oz.)

Operating Temp: 0 to 60°C, convection cooling Relative Humidity: 20% to 90%, non-condensing

-20 to 85°C/5-95% RH Storage: Impact Resistance: 50G half wave per 2 msec 10-55-10 Hz/min @ 1.5mm Vibration Resistance:



Input Specifications*

Item	Condition	Standard
Input Voltage Rated Tolerance	Continuous Operation Starting Condition (Discharge Starting Voltage)	12 Vdc 9.6 Vdc - 14.4 Vdc 9.6 Vdc - 14.4 Vdc
Input Current	V_{IN} = 12.0 Vdc, V_{BR} = 0 V Luminance @ Max.	0.65 A
Rush Current	V_{IN} = 14.4 Vdc Luminance @ Max.	5.0 Azero-p/20 µS or less
Max. Input Power	V_{IN} = 12.0 Vdc, V_{BR} = 0 V Luminance @ Max.	8 W
On/Off Input Current	On/Off L = 0.0 - 0.4 Vdc V _{IN} = 14.4 Vdc	I _{LOW} = -0.45 mA or more (Lamp Lighting)
	On/Off H = Open or V _{IN}	 (Lamp Off)

^{*}Above Specifications Occur @ 25 ± 5°C

Output Specifications*

Item	Condition	Stand	Standard	
		MIN	TYP	MAX
Output Voltage (Vrms)	$V_{IN} = 9.6 \text{ Vdc}, V_{BR} = 0 \text{ V}$	1500		
Tube Current (mArms)	Luminance @ Max.(V_{IN} = 12.0 V, V_{BR} = 0 Luminance @ Min. (V_{IN} = 12.0 V, V_{BR} = 2		7.0 3.0	_
Max. Power Output (W)	$V_{IN} = 12 \text{ Vdc/Luminance } @ \text{Max.}$	_	_	4.0
Ignition Frequency (kHz)	Luminance @ Max.	_	60	_

^{*}Above specifications occur @ 25 \pm 5°C & VIN = 9.6 - 15 Vdc.



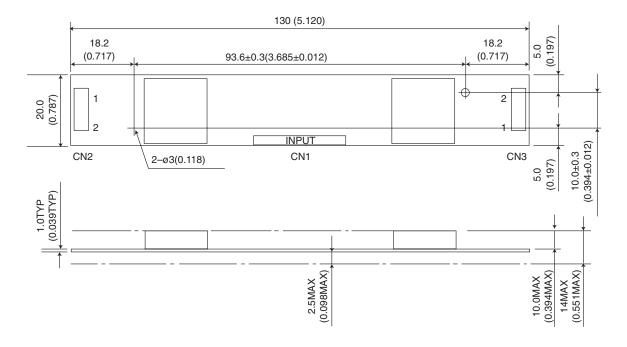
Insulating Withstand Voltage

Item	Rating Description	
Insulating Withstand Voltage	Primary - Secondary	2.0 kVA Impulse
Insulating Resistance	Primary - Secondary Winding - Core	500 Vdc More than 100 M Ω

^{*} Apply voltage to pin 6.

Luminance Variance

Item	Condition	Applied Voltage	Output Current
Luminance @ Max.	Btwn. pin 6 & 7	Vbr = 0.0 V	7.0 mA
Luminance @ Min.	Btwn. pin 6 & 7	Vbr = 2.5 V	3.0 mA



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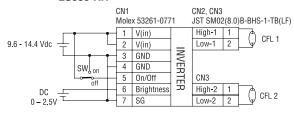




Tech Notes

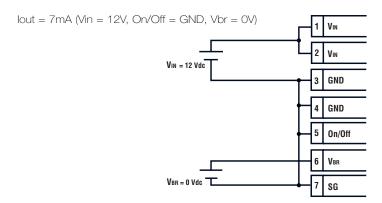
Connection Diagram

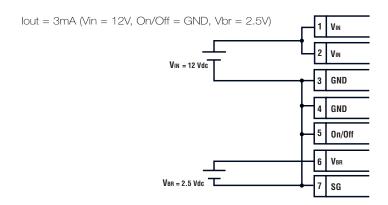
LS530-RH



DC Brightness Control Method*

Maximum output current can be adjusted by applying bias voltage or using a variable resistor as shown below.





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