

Spectrah

Specifications and Applications

DC/AC Inverter Unit

INV2-63452

Product Version: V2.02

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1. General

The INV2-63452 DC to AC inverter is designed to power 2 tubes backlight. It is a high frequency and high efficiency switching power supply, with low noise and light weight.

2. Features

Applicable to 2 Tubes
 Output current 5.2mA/CCFL
 PWM dimming function
 Digital on/off control
 Auto shutdown when lamp open
 Short circuit & overload protection

3. Mechanical Characteristics

	L	W	H
Dimension	100.5mm	25mm	10mm
Weight	MAX. 15g		

4. Connectors

Conn. No.	Brand	Parts No
P1	JST	S5B-PH-SM3
P2	JST	SM04(4.0)

5. Pin Number

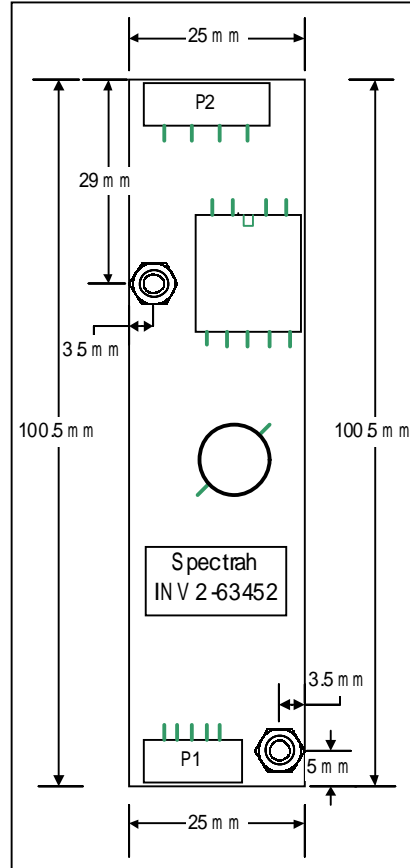


S5B-PH-SM3 (pin1)



SM04(4.0) (pin1)

Mechanical Specifications



PCB components are shown for reference only.
 Actual product may differ from that shown.

6. LCD Application		
LCD Model	LCD Model	Remark
T-51512D121J(OPTREX)		
T-51756D12J(OPTREX)		

7. Operating Conditions						
Item	Symbol	Conditions	MIN	MAX	Unit	Remark
Input Voltage	Vin		9.0	-	V	
Operating Temperature	Top	Ha 90%RH	0	65		
Storage Temperature	Tstg	Ha 95%RH	-10	80		
Operating Humidity	Hop	Ta=0~55	20	90	%RH	
Storage Humidity	Hstg	Ta=20~80	-	95	%RH	

8. Operating Characteristics						
Item	Symbol	Conditions	MIN	TYP	MAX	Unit
Input Voltage	Vin	GND=0V	10.8	12	13.2	V
Input Current (Low Brightness)	IinL	Vin=TYP. ± 1% ON VR=MIN (Iout=MIN)	250	310	380	mA
Input Current (High Brightness)	IinH	Vin=TYP. ± 1% ON VR=MAX(Iout=MAX)	540	630	700	mA
Lamp Current (Low Brightness)	IoutL	Vin=TYP. ± 1% ON VR=MIN (Iout=MIN)	2.0	2.4	2.8	mA rms
Lamp Current (High Brightness)	IoutH	Vin=TYP. ± 1% ON VR=MAX(Iout=MAX)	4.8	5.2	5.5	mA rms
Working Frequency			50	53	56	KHZ
Dimming		Tube Current	>2:1	-	-	
Brightness Control		Connection of Voltage	5.0	-	0	V
Output Voltage		CCFT Current=5mA	-	580	630	V

9. Connector pin description

9-1. (P1) Input Connector			
Pin No.	Symbol	Description	Remark
1	Vin	DC+12V	
2	GND	Ground	
3	Control	ON=+5V; OFF=0V	
4	Brightness	0V(Max); +5V(Min)	
5	GND	Ground	

9-2. (P2) Output Connector			
Pin No.	Symbol	Description	Remark
1	Output	Lamp High Voltage	
2	Output	Lamp High Voltage	
3	NC		
4	Output	Lamp Low Voltage	

10. Inverter Picture

