

# INVC544

This Inverter is designed and adjusted for cold fluorescent lamps used in SX21V001 Series and SX25S001 colour STN liquid crystal display modules.

## FEATURES

- ◆ High efficiency through the use of piezo transformer
- ◆ Very small, very thin and low power consumption design
- ◆ Suitable for low power consumption CFL from 0.6W to 2.0W
- ◆ External On/Off switching of backlight
- ◆ Dimmable from 100 down to 30 percent

## GENERAL DATA

Item	Value	Unit
Module Dimensions	70 x 18 x 6.5	mm
Weight	7 max	g
Efficiency	80 min	%
Mean Time Between Failure (MTBF)	60.000 min	hrs

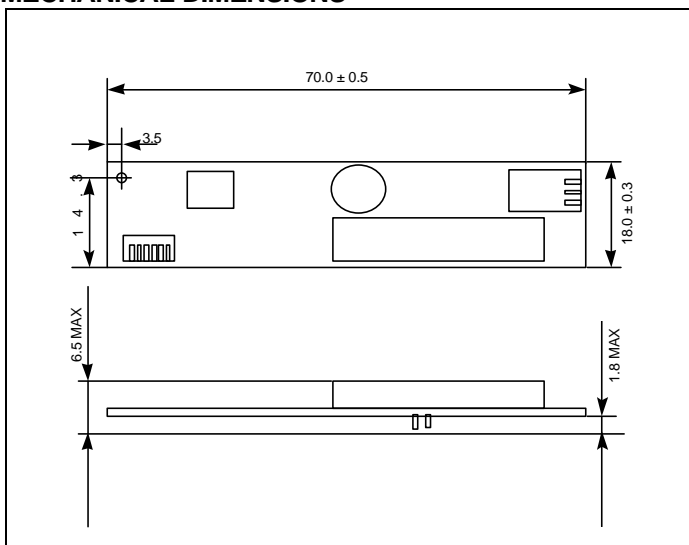
## ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Condition	Min	Max	Unit
Input Voltage	$V_{MAX}$	-	-	20	V
Operating Temperature	$T_{OP}$	-	5	50	°C
Storage Temperature	$T_{ST}$	-	-20	70	°C
Humidity	-	-	-	90	% RH

## ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min	Typ	Max	Unit
Input Voltage	$V_{IN}$	-	6	12.0	17.0	V
Input Current	$I_{IN}$	12V, Duty 97%	160	180	200	mA
		12V, Duty 47%	54	60	66	mA
Lamp Current	$I_L$	12V, Duty 97%	2.7	3.0	3.3	mA
		12V, Duty 47%	1.1	1.3	1.5	
Lamp Power	$P_L$	12V, $I_L=3mA$	-	1.5	2.8	W
Rush Current		12V	-	-	2.5	A
Frequency	$f_L$	12V, Duty 97%	50	60	70	kHz
Dimming Range	-	12V, $T=25°C$	-	100-30	-	%
Startup Characteristics	The unit must start up at 5°C+/- 1°C, DC 6V					

## MECHANICAL DIMENSIONS



## INPUT AND OUTPUT CONNECTORS

Input Connector	Input Housing Connector
MOLEX 53261-0690	-
Output Connector	Output Housing Connector
JST SM02B-BHSS-1	-

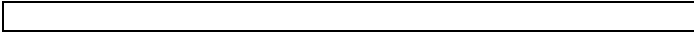
## INPUT CONNECTOR PIN ASSIGNMENT

Pin No	Symbol	Comment
1	VCC	6 - 17V
2	VCC	6 - 17V
3	PWM	PWM Signal for Dimming Control (515 Hz, 3.3-5V, ON Duty 97%-40%)
4	ON/OFF	OFF at Open, ON at High (3.3V-5V)
5	GND	Ground
6	GND	Ground

## OUTPUT CONNECTOR PIN ASSIGNMENT

Pin No	Symbol	Comment
1	CFL HV	High voltage output
2	GND	GND

# HITACHI



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