

# LED-CONVERTER UNIT

PS-LD0302-x-y(S)

(PRELIMINARY INFORMATION)

**DESCRIPTION :**

This low profile LED-Converter is developed for max. 3 LED-lines  
Optimized for **Sharp: LQ104V1DG62**

**APPLICABLE:**

- 1~3 LED lines (Serial Mode)
- Pout max. 9W
- LED Voltage max. 25Vdc
- Lamp Current max. 80mAdc



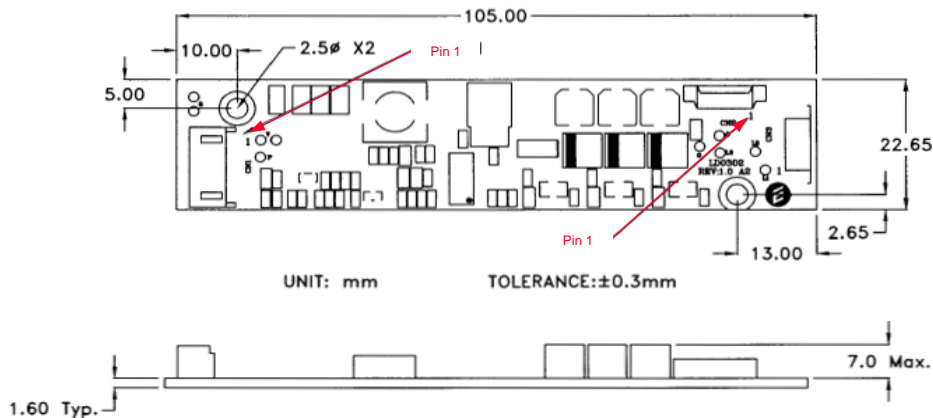
**FEATURES :**

- Internal Open LED Detection for every Line
- Ext. PWM Dimming
- 1000:1 dimming ratio with external PWM
- Remote ON / OFF (If you want)
- RoHS compliant (S)

**TEMPERATURE & HUMIDITY :**

- Operating Temperature Range -20°C ~ +70°C
- Storage Temperature Range -20°C ~ +85°C
- Humidity 95 %RH max

**DIMENSIONS :** L x W x H 105 x 23 x 7.5 mm



Weight :13 (g) typ.

**Components**

No.	Part Description	Qty.	Material	Note
1	PCB	1	UL94V-0 (FR-4 or CEM-3)	t=1.0mm
2	Connector CN1	1	S5B-PH-SM3-1-TB	Molex
3	Connector CN3	1	53261-0690 / PBD	Molex

**Power Systems – The Power Solution**

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**Input side CN1:**

Pin No.	Symbols	Ratings
CN 1-1	Vin	4.75 ~ 13.2 Vdc
CN 1-2	GND	-
CN 1-3	Ext. PWM	0 ~ 0.5 = OFF / 2.5 ~ 5.0 = ON
CN 1-4	N.C.	-
CN 1-5	N.C.	-

**Output side CN2:**

Pin No.	Symbols	Ratings
CN 3-1	RTN1(-)	LED LINE 1 RETURN
CN 3-2	RTN2(-)	LED LINE 2 RETURN
CN 3-3	RTN3(-)	LED LINE 3 RETURN
CN 3-4	Vhigh(+)	TBD
CN 3-5	Vhigh(+)	TBD
CN 3-6	Vhigh(+)	TBD

**ELECTRICAL CHARACTERISTICS :**

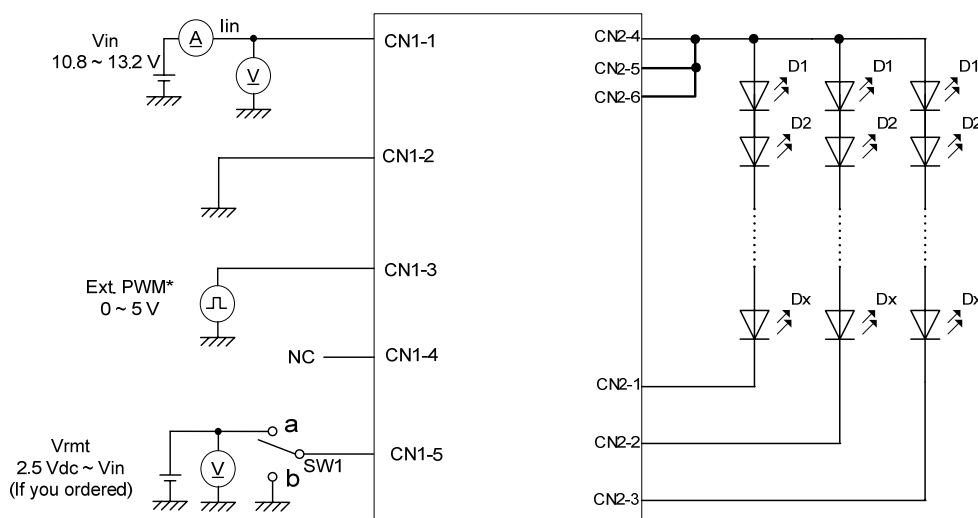
Parameters	Symbols	Conditions			Specification			Unit	Note
		Vin (V)	Vbr (V)	Tu (°C)	Min.	Typ.	Max.		
Output Current	Iout	4.75 ~ 13.2	0	-20~+70	TBD	80	TBD	mAdc	Duty 100% max current
Input Current	Iin	4.75 ~ 13.2	0	-20~+70	0.4	-	2.0	Adc	
Open Load Shutdown	Vbias	4.75 ~ 13.2	0	-20~+70	-	28	-	Vdc	
PWM Frequency	f(PWM)	4.75 ~ 13.2	0	-20~+70	150	-	300	Hz	
Output Power	Pout	4.75 ~ 13.2	0	-20~+70	TBD	TBD	TBD	Watt	Tu: -20~+50degC
Output Power	Pout	4.75 ~ 13.2	0	-20~+70	TBD	TBD	TBD	Watt	Tu: -20~+70degC
Output Power	Pout	4.75 ~ 13.2	0	-20~+50	TBD	TBD	TBD	Watt	For one line
Output Power	Pout	4.75 ~ 13.2	0	-20~+70	TBD	TBD	TBD	Watt	For one line

Note 1 : Pin terminal style converters have Molex connectors mounted.

Note 2 : The external PWM frequency should be in a range of 100 ~ 500Hz. For other frequency please request. The optimum is 250 Hz.

Note 3 : External PWM-signal is Low active.

**TEST CIRCUIT :**

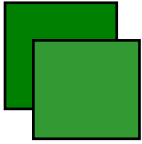


\*) Only active when Vrmt is 0 Vdc or floating

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## ORDER KEY :

### PS-LD0302-x

With order of this converter please give the following key:

-x to be replaced by:

-1 output connector on CN2

-2 output connector on CN3

Examples:

PS-LD0302-1 (S)

Converter with output connector on CN2

PS-LD0302-2 (S)

Converter with output connector on CN3

## CABLES :

**For input:** 500 mm, stripped and tinned ends, order key <input cable #2>

**For output:** 500 mm, stripped and tinned ends, order key <input cable #1>

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