3.2" Front Light Panel

12936-01 | Product Data Sheet | 2020

Overview

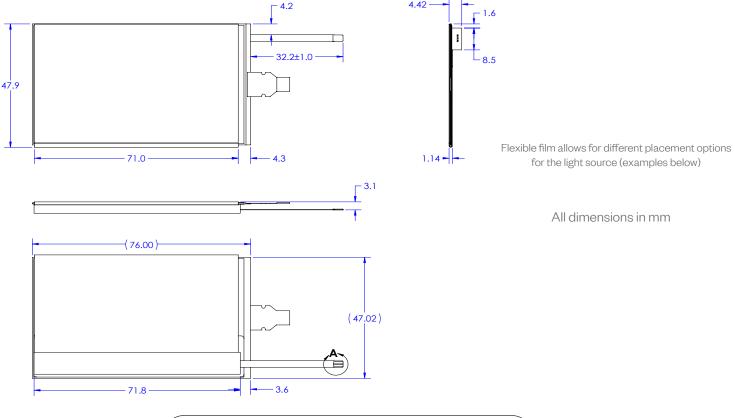
The **FLEx Front Light Panel** optical film is designed to laminate to the front surface of **Sharp reflective display (LSO32B7DDO2)** to provide high quality on-demand display lighting. This thin plastic panel incorporates only a single LED which enables product designers to develop ultra-thin devices and minimize battery use.

- One low-power LED (included in Front Light)
- Over 80x less power compared to traditional backlighting
- 0.05 mm thick FLEx film is over **5x thinner** than alternative lightguides
- Simple I/F and Connectivity to System Board

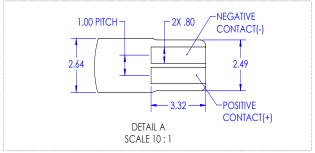
For more information: WEB <u>flexlighting.com</u> CONTACT <u>flexlighting.com/contact</u> PHONE 773-295-0305



Mechanical



PRELIMINARY



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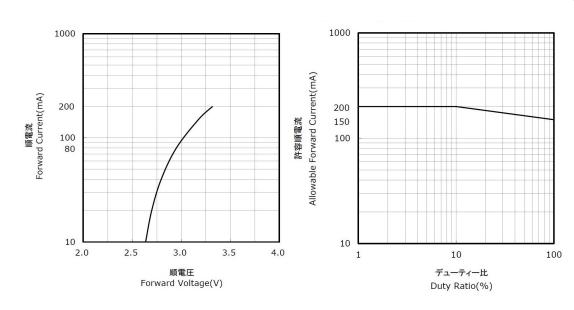
FLEX

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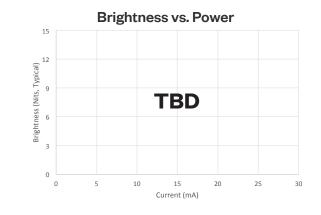
Electrical

ltem	Symbol	Typical	Absolute Max	Unit
Forward Current	I _F	40	60	mA
Pulse Forward Current	l FP		200	mA
Reverse Voltage	V _R	2.95	3.4	V



Optical (PRELIMINARY)

3.2" Sharp + Front Light (12936-01)								
ltem		Symbol	TYP.	Unit	Remark			
Viewing Angle CR >2	V	Θ 11 Θ 12		° (Degree)	[Remark 1]			
	Н	Θ 21 Θ 22		° (Degree)				
Contrast Ratio	Front light ON	CR	9		[Remark 2]			



Remark 1: Viewing Angle

Ref Image 1

Remark 2: Definition of Contrast Ratio

 $Contrast Ratio (CR) = \frac{Reflection intensity in white display}{Reflection intensity in black display}$

- Molex 503480-0400 - Molex 52745-0497 - Molex 54550-0471 - Molex 54548-0471 (bottom)

For more information: web <u>flexlighting.com</u>

CONTACT <u>flexlighting.com/contact</u> Phone **773-295-0305**

- Molex 505110-0492

Example ZIF Connectors:

Measurements taken with a Minolta Chroma Meter CS-100 at a 17" view distance

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