2.7" Front Light Panel

11103-xx | Product Data Sheet | 2020

Overview

Mechanical

The FLEx Front Light Panel optical film is designed to laminate to the front surface of Sharp reflective display (LS027B7DH01) 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.

28.9

- 3.4

2.4

- 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 flexlighting.com CONTACT flexlighting.com/contact PHONE 773-295-0305

> SHARP Approved Value-Added Partner

DETAIL A 7.00 2.08 64.4 1.81 4.54 3.85 11103-06 FLAT ROLL PRELIMINARY NEGATIVE CONTACT (-) 3.32 1.00 PITCH 2.64 2.49

> DETAIL A (TYP) SCALE 10:1

Flexible film allows for different placement options for the light source (examples below)







All dimensions in mm

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POSITIVE CONTACT (+)

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.80 2X



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Electrical

ltem	Symbol	Typical	Absolute Max	Unit
Forward Current	I _F	10	25	mA
Pulse Forward Current	l FP		80	mA
Reverse Voltage	V _R		5	V



Optical

2.7" Sharp + Front Light (11103-xx)								
ltem		Symbol	TYP.	Unit	Remark			
Viewing Angle CR >2	V	Θ 11 Θ 12	65 65	° (Degree)	[Remark 1]			
	Н	Θ 21 Θ 22	30 40	° (Degree)				
Contrast Ratio	Front light ON	CR	10		[Remark 2]			





Remark 2: Definition of Contrast Ratio

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

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

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Example ZIF Connectors:

- Molex 503480-0400
- Molex 52745-0497
- Molex 54550-0471
- Molex 54548-0471 (bottom)
- Molex 505110-0492

