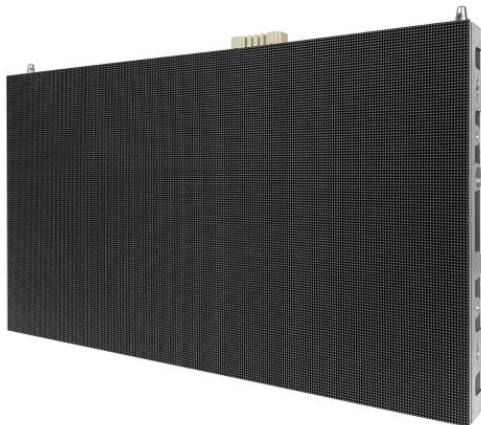


Sharp LD-FE123

1.2 mm Indoor FinePitch LED Module

Datasheet



Engineered for efficiency, without compromise

For bezel-free visual impact and long-lasting performance, the Sharp LD-FE3 Series sets a new benchmark in energy-efficient dvLED display technology. Built on NEC's legacy of engineering excellence, the third-generation FE Series features advanced Flip-Chip technology and industrial-grade components to deliver vibrant, high-contrast imagery while reducing energy consumption and heat output by up to 60%. The result is a substantial reduction in operating costs and HVAC demands, without compromising visual precision or performance.

The proven mechanical all-metal cabinet design ensures precise module alignment, long-term structural stability, and fire safety compliance. Configurable to any shape or size, its modular architecture supports endless creative potential, while front-serviceable modules enable hassle-free maintenance. With fine pixel pitch performance, the FE3 Series modules create a seamless detail-rich viewing experience, ideal for command and control, broadcast, signage, and conferencing. Its cost-saving efficiency also makes it a smart choice for education and leisure environments.

Benefits

Significantly lower energy usage – Highly efficient Flip-Chip IMD technology reduces power consumption by up to 60% compared to standard SMD, at the same brightness.

Uncompromised image quality – An exceptional contrast ratio, ultra-deep black levels, fine pixel pitch, and wide viewing angles ensure vivid clarity and accurate colour reproduction even in bright

ambient light conditions.

Minimised interference – low electromagnetic emissions allowing for EMC Class-B certified modules.

Scalable versatility – Customisable to any shape or size, the bezel-free modules fit the space available enabling endless creative possibilities and seamless large-surface installations.

Slim design – with a flush rear profile, LED modules can be integrated very close to the wall with minimal gap necessary due to very low heat emission.

Product Information

Product Name	Sharp LD-FE123
Product Group	1.2 mm Indoor FinePitch LED Module
Order Code	81000654

Display

Pixel Configuration	3-in-1 SMD (Black)
LED type	FlipChip SMD (1010)
Pixel Pitch [mm]	1.2
Brightness (max.) [cd/ m²]	700
Lifetime	100000 hrs (50% brightness)
Contrast Ratio (typ.)	8000:1
Viewing Angle [°]	170 horizontal / 160 vertical
Dimming Capability	256 levels
Colour Processing	16 bit
Colours [Trill.]	281
LED Driving Method	1/45 dynamic scan
Frame Rate [Hz]	50/60
Refresh Rate [Hz]	≤ 3840
Colour Temperature [K]	3000 - 9500

Screen Resolution

Resolution per m²	623269
Number of Pixel per module [dot]	480 x 270
Number of Pixel per card [dot]	120 x 135

Electrical

Power Consumption typ. [W]	106 per m² (normal use)
Power Consumption max. [W]	183 per m²
Power Consumption typ. [BTU]	361 per m² (normal use)
Power Consumption max. [BTU]	624 per m²

Environmental Conditions

Operating Temperature	-20 to 40
[°C]	

Operating Humidity [%]	10 to 80
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Mechanical

Dimensions (W x H x D)	608 x 342 x 49
[mm] per module	

Weight [kg]	8.8
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Additional Features

Special Characteristics	Cableless Connector for Data and Power; Flush Surface SMD Design; Single Data Receiving Cards; Single Power Supplies
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Manufacturer	SHARP
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Serviceability	Front Service
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IP Level	IP20
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Certifications	CE; EMC Class B; ETL; FCC Class A; RoHS
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Warranty	3 years
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Material	Aluminum Cabinet
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FCC Class A



CE



RoHS

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