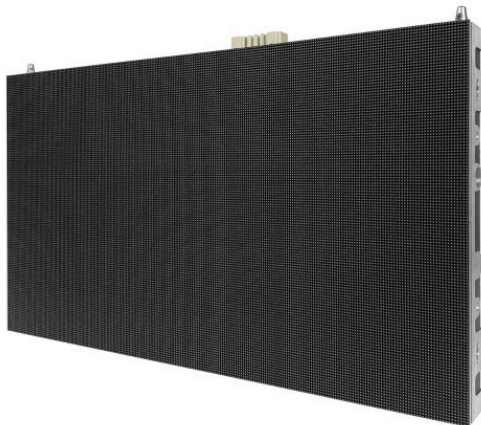


Sharp LD-FE093

0.9 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-FE093
Product Group	0.9 mm Indoor FinePitch LED Module
Order Code	81000685

Display

Pixel Configuration	4-in-1 IMD (Black)
LED type	FlipChip IMD (1616)
Pixel Pitch [mm]	0.9
Brightness (max.) [cd/ m²]	600
Lifetime	100000 hrs (50% brightness)
Contrast Ratio (typ.)	4000:1
Viewing Angle [°]	170 horizontal / 170 vertical
Dimming Capability	256 levels
Colour Processing	16 bit
Colours [Trill.]	281
LED Driving Method	1/46 dynamic scan
Frame Rate [Hz]	50/60
Refresh Rate [Hz]	≤ 3840
Colour Temperature [K]	3000 - 9500

Screen Resolution

Resolution per m²	1108033
Number of Pixel per module [dot]	640 x 360
Number of Pixel per card [dot]	160 x 180

Electrical

Power Consumption typ. [W]	96 per m² (normal use)
Power Consumption max. [W]	168 per m²
Power Consumption typ. [BTU]	328 per m² (normal use)
Power Consumption max. [BTU]	574 per m²

Environmental Conditions


Operating Temperature [°C]	-10 to 40
Operating Humidity [%]	10 to 80

Mechanical


Dimensions (W x H x D) [mm] per module	608 x 342 x 49
Weight [kg]	8.8

Additional Features


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



FCC Class A



CE



RoHS