

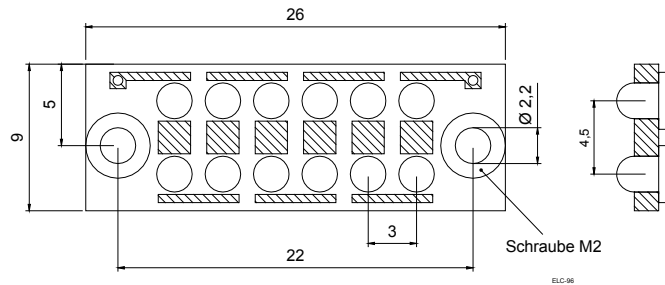
# LED Array

**ELA-880-225**

Color	Type	Technology	Case
Infrared	12 x Flip Chip - SMD	GaAlAs/GaAlAs	PCB - Board

Features: High output power,  
For heat sink application

Applications: IR - Illumination,  
For optical sensors



## Maximum Ratings\*

T<sub>amb</sub> = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Forward current (DC)*		I <sub>F</sub>	200	mA
Peak forward current*	t <sub>p</sub> ≤ 10 μs, f ≤ 500 Hz	I <sub>FRM</sub>	2000	mA
Reverse voltage	I <sub>R</sub> = 10 μA	V <sub>R</sub>	5	V
Power dissipation*		P <sub>D</sub>	4	W
Operating temperature range**		T <sub>amb</sub>	-20 to +80	°C
Storage temperature range**		T <sub>stg</sub>	-30 to +100	°C

\*on good thermal heat sink

\*\* not tested

## Optical and Electrical Characteristics\*\*

T<sub>amb</sub> = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I <sub>F</sub> = 100 mA	V <sub>F</sub>		17,5	20	V
Radiant power*	I <sub>F</sub> = 100 mA	Φ <sub>e</sub>	90	120		mW
Peak wavelength	I <sub>F</sub> = 100 mA	λ <sub>p</sub>	870	880	900	nm
Spectral bandwidth at 50%	I <sub>F</sub> = 100 mA	Δλ <sub>0.5</sub>		35		nm
Viewing angle		φ		25		deg.
Switching time for a single LED	I <sub>F</sub> = 100 mA	t <sub>r</sub> , t <sub>f</sub>		25		ns

\*Proper heat sinking is required to maintain correct device operation and reliability at currents ≥ 100 mA.