



**LASER DIODE ARRAY FIDL-8-50S-830**

**Features**

- Individually addressable emitters
- Single mode ( TEM<sub>00</sub> )
- High reliability

**FIDL-8-50S-830** is 830nm laser diode array based on AlGaAs/GaAs multi quantum well structure fabricated by MOCVD. Low threshold current and high slope efficiency contribute to low operating current enhancing reliability.

**FIDL-8-50S-830** is CW single transverse mode index guide semiconductor laser diode array. It is supplied in TO-8. The laser is suitable for application in various opto-electronic systems.

**Single emitter optical and electrical characteristics (T = 25°C):**

Operating parameters	Symbol	Min	Typ	Max	Unit
Optical output power per emitter	P <sub>out</sub>	50	-	55	mW
Lasing wavelength	λ	820	830	840	nm
Emitting area	W×H	-	3.0×1.5	-	μm x μm
Threshold current	I <sub>th</sub>	-	25	-	mA
Forward current	I <sub>f</sub>	-	-	110	mA
Forward voltage	U <sub>f</sub>	-	2.4	-	V
Beam divergence parallel	Θ <sub>  </sub>	8	10	12	deg.
Beam divergence perpendicular.	Θ <sub>⊥</sub>	25	30	35	deg.
Mode structure			SM		

**Array linear characteristics :**

Parameters	Symbol	Min	Typ	Max	Unit
Number of emitters	n		8		
Pitch	l	-	400	-	μm
Position accuracy	ΔX			±5	μm
	ΔY			±1	μm
	ΔZ			±5	μm
Off angle	ΔΘ			<±3	deg.

Additional information

- operating temperature - -40°C +40°C;

<b>PACKAGE SPECIFICATION</b>
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**Package type "M8":**

Pin	Function
1	LD cathode ("") case
5-12	LD anode ("")

