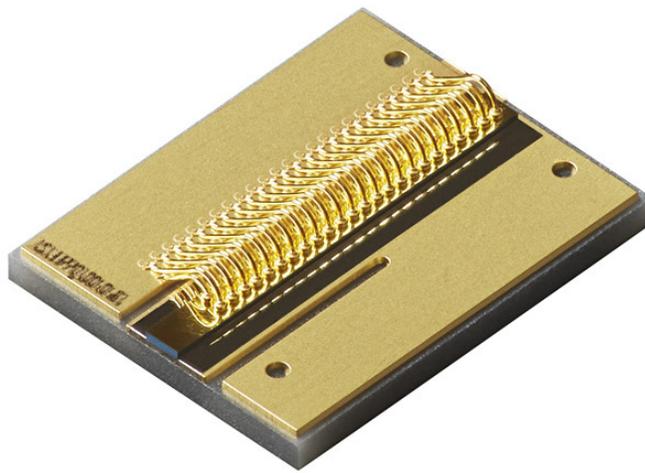


28 W 793 nm 320 μ m HIGH POWER HIGH PCE SINGLE EMITTER LASER DIODE ON SUBMOUNT

SES28B-793A-320-10



FEATURES

- 28 W high PCE HPL Multimode Chip on Submount
- 785 to 789 nm at 3A 25°C
- 320 μ m Emitter Width
- CuAlN-Submount

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2.1 Electro-Optical Performance

Table 1: Target chip customer specifications soldered onto a heat sink held at 25°C – CW

Parameter	Symbol	Min.	Typical	Max.	Unit	Condition
Threshold Current	I_{th}		2.2	3	A	25°C
Operating Power	P_{op}	25	27		W	28A, 25°C
Operating Current	I_{op}			28.0	A	25°C
Operating Voltage	V_{op}		1.8	1.95	V	28A, 25°C
Slope Efficiency	η_d		1.05		W/A	25°C
Wavelength Center	λ_c	785		789	nm	3.0A, 25°C
Lateral Far Field 95% PIB	Θ_{LFF}	4	8.5	11.5	deg	28A, 25°C
Vertical Far Field 95% PIB	Θ_{VFF}	45	52	58	deg	28A, 25°C
Polarization Ratio TM/(TM + TE)	PR		0.97			28A, 25°C

Comments:

- All specified values depend on mounting technology and operating conditions – no warranty.
- Target values are based on Coherent mounting technology.

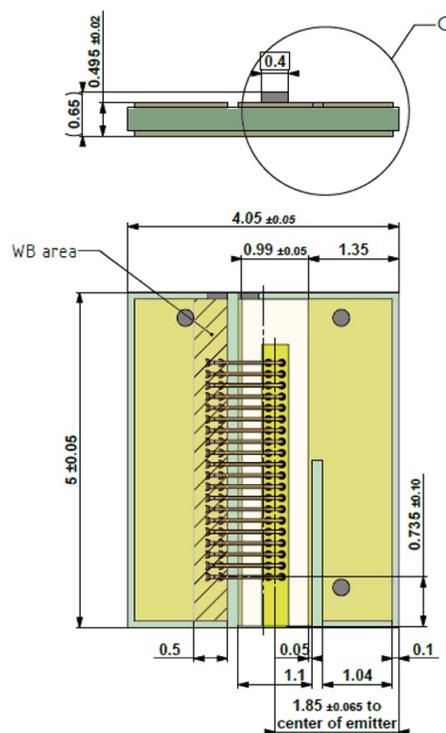
2.2 Mechanical Dimensions

Table 2: Geometrical Dimensions of Bare Chip

Parameter	Min.	Typical	Max.	Unit
Chip Width		500		μm
Chip Length	25	4200		μm
Chip Thickness		120		μm
Emitter Width		230		μm

2.3 Chip on Submount Assembly

Figure 1: Chip on submount Assembly Drawing



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3 Safety

This classification refers exclusively to our component and serves only as an indication for the classification according to EN 60825-1.

It is in the system manufacturer's responsibility to classify the integrated product.



4 ROHS and REACH Compliance

We are fully committed to environment protection, human health and sustainable development and have set in place a comprehensive program for removing polluting and hazardous substances from all our products. The relevant evidence of RoHS and REACH compliance is held as part of our controlled documentation for each of our compliant products.

5 Revision History

Revision	Date	Description of Change
A	25.02.2025	Initial Issue of Document.