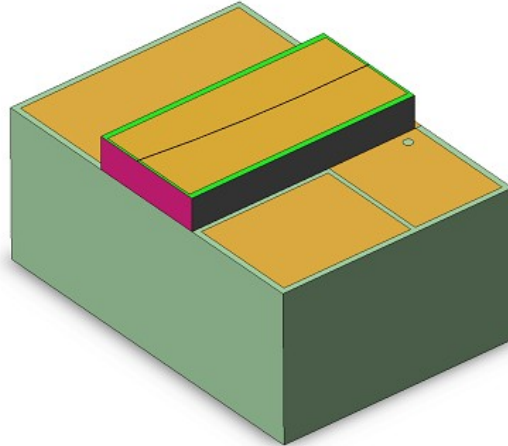


SAF 1118: L-band Single Angled Facet Gain Chip

7.1.2.SP.1118 Rev C

Description

COVEGA's Single Angled Facet (SAF) gain chip is a high-power InP active waveguide gain element. The proprietary SAF design produces low modal reflectance at the angled facet and optimum reflectance at the normal facet. This unique combination of ridge waveguide laser design and broadband low angled facet reflectance makes the SAF ideally suited for use as the gain component in high-power widely tunable external cavity lasers.



Features

Applications

- | | |
|--|--|
| <ul style="list-style-type: none"> ✓ Gain medium for widely tunable external cavity semiconductor lasers ✓ Gain medium for narrow line-width fiber Bragg Grating Lasers. | <ul style="list-style-type: none"> → Broad tuning range → High Output Power → Low Angled Facet Reflectivity |
|--|--|

Specifications

Specifications based on Litrow external cavity configuration and R2 = 10%; External Cavity Losses < 5 dB CW; T (Chip) = 25°C

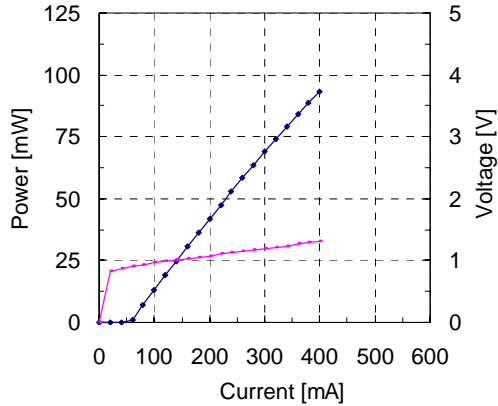
Parameter		Min	Typ	Max	
Operating Current	I_{OP}		300	350	mA
Operating Wavelength Range: L - Band	Λ	1568		1608	nm
Threshold Current	I_{TH}		60	75	mA
Output Power over Band	P_{OUT}	40	60		mW
Side-Mode Suppression Ratio	SMSR		50		dB
Angled Facet Reflectivity	R1		0.001	0.01	%
Forward Voltage	V_F		1.3	1.8	V
Chip Length	L		1.0		mm
Lateral Beam Exit Angle	θ_{EXT}		19.5		deg
Beam Divergence Angle (FWHM)					
- Transverse	θ_T	26	30	34	deg
- Lateral	θ_L		16		deg

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

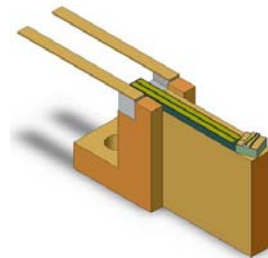
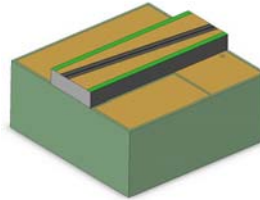
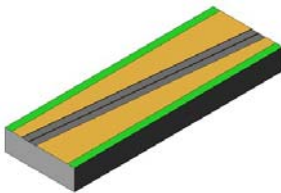
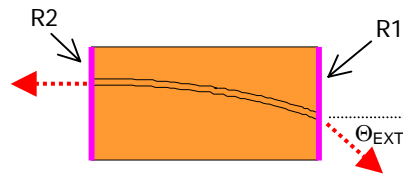
The picture is a representation. The actual part may vary from the one shown.

SAF 1118

Performance



Packaging



Bare Die

Chip on Submount

Chip on Heatsink

Ordering Information

SAF 1118 - XX - XX - XXX			
XX	XX	XXX	
ECL Peak Wavelength	R2 Reflectivity	Submount	
61 = 1610 nm	10 = 10%	DIE = Bare Die	
ZZ = Custom	90 = 90%	COS = Chip on Submount	
		HTS = Heatsink	

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