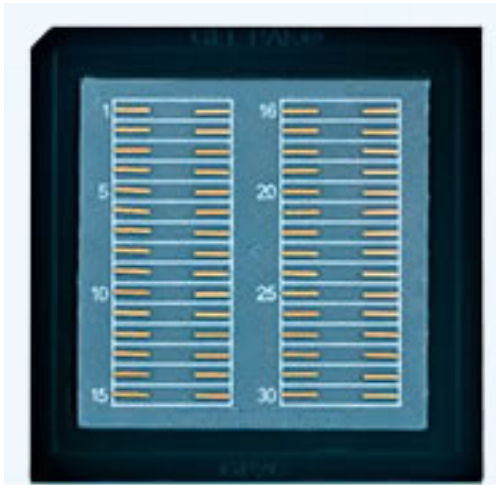
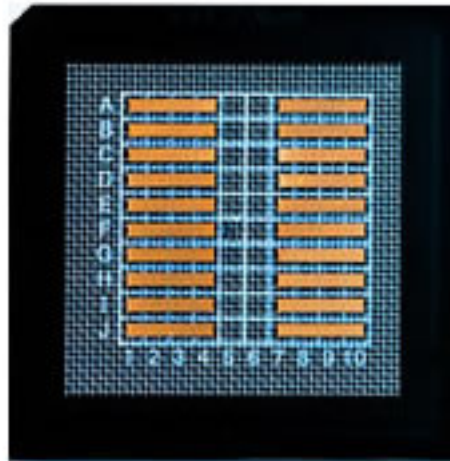


STL-UMC-200-808-TE-5-2.0

High-power Diode Laser Chip, 808nm, 5W CW


STL series chips

STL Series bars
Features:

- High electrical-optical conversion efficiency
- Customized products available with short lead time
- Quick response to the customer's enquiry

Specifications

	Symbol	Min.	Typical	Max.	Unit
Operation					
Central Wavelength	λ	803	806	809	nm
Optical output power	Popt		5		W
Operation mode			CW		
Power modulation			100		%
Geometrical					
Emission width	W		200		um
Emitter pitch	P		500		um
Cavity length	L	1990	2000	2010	um
Thickness	D	110	130	150	um
Electro-optical parameters					
Fast-axis divergence angle	θ_{\perp}		38	40	Deg
Slow-axis divergence angle	θ_{\parallel}		8	10	Deg
Spectral bandwidth FWHM	$\Delta\lambda$		2	3	nm
Pulse wavelength	λ	800	803	806	nm
Slope efficiency	η	1.1	1.25		W/A
Electro-optical conversion efficiency		55	60		%
Threshold current	I _{th}		30.8	0.9	A
Operation current	I _{op}		4.8	5.0	A
Operation voltage	V _{op}		1.75	2	V
Wavelength shift vs. temp.	$\Delta\lambda/\Delta T$		0.28		nm/°C
Polarization			TE		
LD operation temperature		15	25	35	°C

Remark: Pulse wavelength was tested at low current, low pulse duty and short pulse width.