


Product Division	HPDL High power diode lasers
Product	LBS-98A32-25CW-FAC-C1
Description	High power laser head. 980nm, 3200W CW, fast axis collimation. Optics to achieve a line of 136mm x 300µm.
Main Features	<p>Solder-free diode bar mounting technology, exclusive from MONOCROM S.L., offers:</p> <ul style="list-style-type: none"> Long lifetime, due to the absence of the mechanical stress caused by the soldering process at high temperature and avoiding microchannels for water-cooling. High reliability in pulsed conditions, since the clamped bars do not suffer the same fatigue effect than the soldered ones due to the thermal cycle. More than 100.000.000 shots Small thermal resistances, owing to the reduction of the contact resistance between electrodes and laser bar. No micro channels are needed to reach low thermal resistances. Large storage temperature interval tested from -40°C to + 85°C.
Applications	Printing
Picture(s)	
Outline	NA

LBS-98A32-25CW-FAC-C1 | TENTATIVE SPECIFICATIONS

	Minimum	Operation	Max. Rating	
LASER STACK	Wavelength [nm]	970	980	990
	Stack peak power, P_{max} [W]	2800	3200	3520
	Operating current, I_{op} [A]		110	125
	Threshold current, I_{th} [A]	15	18	25
	Voltage @ connectors ⁽¹⁾ , V [V _{dc}]	54,4	57,6	64,0
	Pulse length [ms]			CW
OPTICS⁽²⁾	Working distance [mm]	125,0	129,5	135,0
	Depth of focus [mm]		1	2
	Line width ($1/e^2$) [μ m]	240	280	320
	Line length (90% top plate) [mm]	120	130	140
	Optical efficiency [%]	85	90	94
	Irradiance in target area [kW/cm ²]	4	8	13
BODY	Coolant flow	12	15	20
	Coolant pressure (inlet) [bar]		5	8
	Coolant temperature [°C]	15	20	25
	Coolant	90% Distilled water + 10% ethyleneglycol		
	Package Dimensions ⁽²⁾ (wxhxl) [mm]	209x112x70		
	Weight [g]	2500		
	Electrical connections	Threads M6		
	Water connections	Water fittings for Ø8mm tube		
	Laser class product (EN-60825)	4		
Expected lifetime	10.000h			

Specifications at 20°C, in the beginning of lifetime.

1. Voltage from the power supply must be higher, as due to high current there will be a voltage drop in the cables.
2. Parameters can vary depending on final optomechanical setup.

