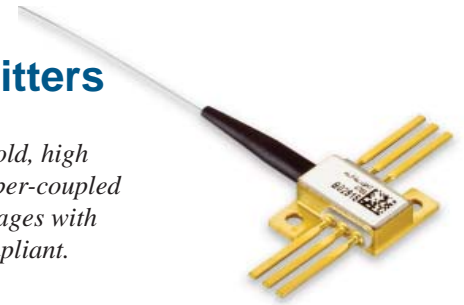




808 nm High-Efficiency Single Emitters

Alfalight's "generation B" 808 nm pump lasers offer low threshold, high slope efficiency, and excellent stability over temperature. The fiber-coupled devices offer 5.0 watts ex-fiber in high-reliability uncooled packages with 200 μm , 0.22 NA fiber. Alfalight's 6-pin package is GR-468 compliant.



Features

- 5.0 W Output
- Fiber-coupled 200 μm / 0.22 NA
- High Reliability
- Environmentally-rugged

Applications

- Nd:YAG and Nd:YVO₄ microlasers
- Laser-initiated ordnance
- End-pumped DPSS lasers

Device Characteristics*

AM6-808B-30-503

Electro-Optical	Symbol	Min	Typ	Max	Units
Center wavelength	λ_c	804	808	811	nm
Output power	P_o	5.0			W
Operating current	I_o		6.0	7.0	A
Forward voltage	V_f		1.73	1.8	V
Threshold current	I_{th}		0.95	1.4	A
Spectral width	$\Delta\lambda$		2.0	3.0	nm

Temperature and Thermoelectric Cooler

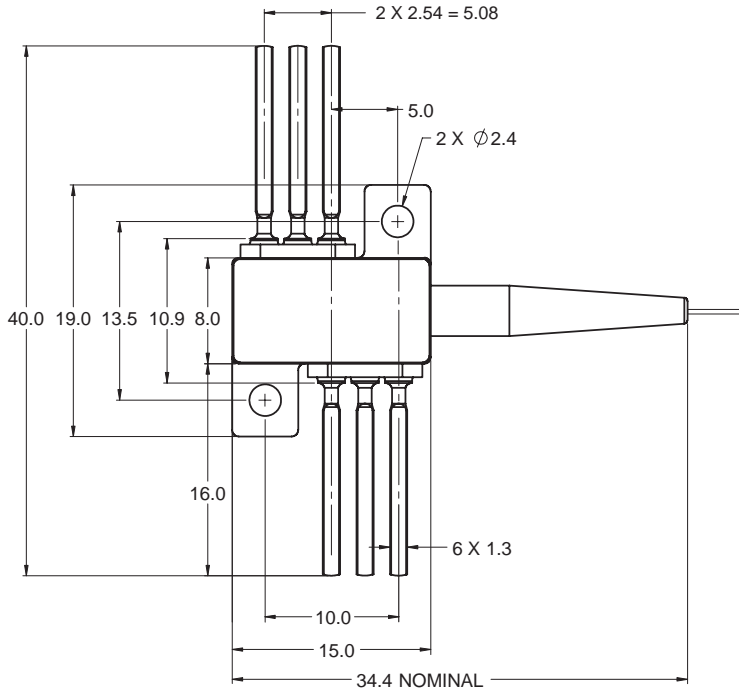
Thermistor value at 25°C	R_{th}	9.5	10	10.5	k Ω
Thermistor constant, 0 - 50°C	β		3892		K
Spectral shift	$d\lambda/dT$		0.27		nm/°C

Mechanical

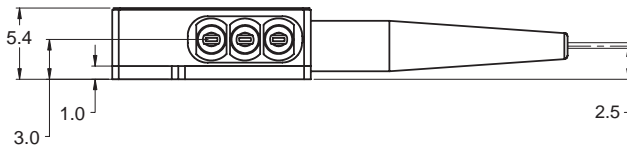
Case operating temperature		0		50	°C
Case storage temperature		-10		85	°C
Fiber core diameter			200		μm
Fiber NA	NA		0.22		
Fiber length		1.25	1.5	1.8	m

* All conditions are at 25°C submount temperature and 5 W output power unless otherwise noted. Temperature T refers to package thermistor temperature.

Package Dimensions



All units in mm



Package Pinout

