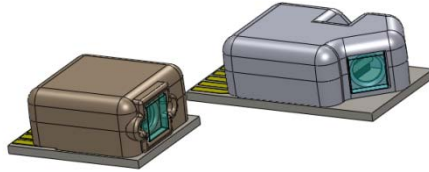


Spectralus[®] Atto Green Laser Source^(a) Models Atto-40-1600-30, Atto-K-40-1600-30^(b)



SPECIFICATIONS^(c)

Rev 1.3

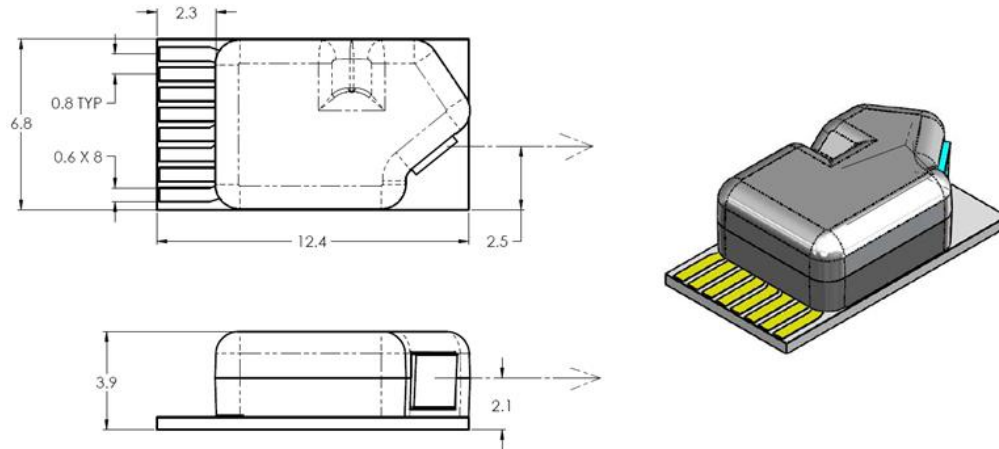
Parameter	Symbol	Unit	Min	Typical	Max
1.0 Optical Performance					
a	Average Optical Output Power	P _o	mW	40	
c	Green Center Wavelength, Operating	λ _c	nm	532	
e	Beam Quality	M ₂		1.2	
f	Beam Waist Diameter		micron	40	
g	Beam Divergence		mrad	10	20
h	Power Stability (RMS)		%	+/-8% over 2 hr over temp. range, +/-3% over 2 hr at fixed temp.	
i	Polarization			Linear ^(d) , >100:1	
j	IR Residual Power in Beam		mW		2
2.0 Electrical-Optical Performance					
a	Laser Operating Current (peak)	I _o	A	0.7	
b	Laser Operating Voltage	V _o	V	1.8	
d	Nominal Operating Mode		1600Hz, 30% duty cycle or per model number ^(b)		
h	Peak Wall-plug Efficiency BOL ^(e)	PCE	%	12	
3.0 Thermal Performance					
a	Case Operating Temperature		°C	10	50
b	Optimum Case Operating Temperature		°C	35	
4.0 Mechanical					
a	Length	L	mm	8.7 for Atto-K, 12.4 for Atto ^(g)	
b	Width	W	mm	6.8	
c	Height	H	mm	3.9	
d	Volume	V	cm ³	0.23 for Atto-K, 0.33 for Atto ^(g)	

- Protected under U.S. Patents 7,742,510 and 7,413,635. Other U.S. and international patents pending.
- The models Atto-p-f-dc and Atto-K-p-f-dc are pre-set at the factory and are coded by the package type (Atto or Atto-K), power (p in mW), repetition frequency (f in Hz) and duty cycle (dc in %).
Standard models include: **Atto-40-1600-30, Atto-K-40-1600-30**
Models with other frequencies and duty cycles may be supplied per customer request.
- All specifications are subject to change without notice.
- Polarization is linear and is parallel to the package base.
- BOL: beginning of life

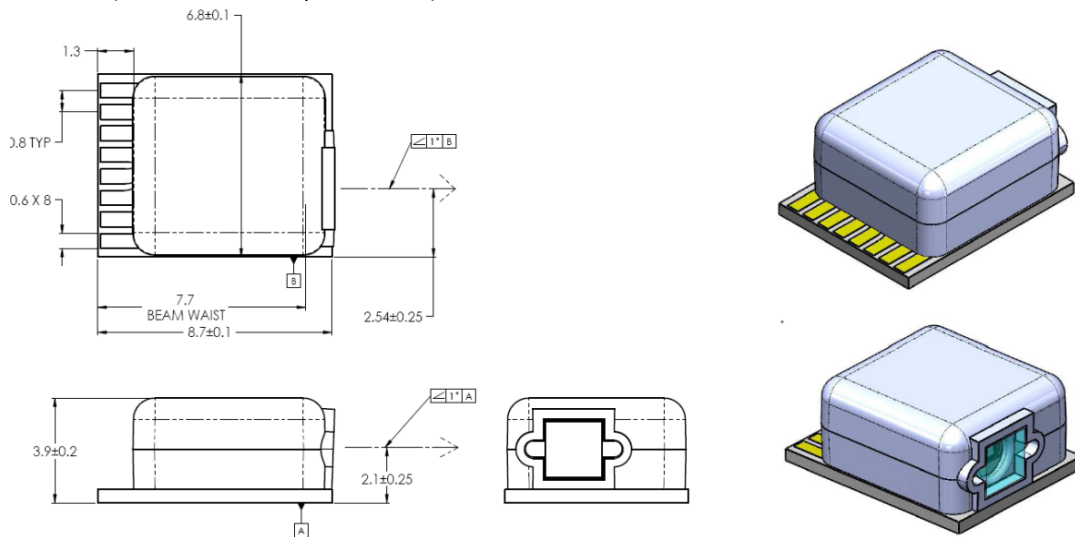
- f. Atto and Atto-K lasers can be supplied with a driver board powered by the wall outlet.
- g. See product drawings on the next page for the package versions with or without monitor photodiode.

LASER HEAD DIMENSIONS (in mm):

Atto Laser (with monitor photodiode):



Atto-K Laser (without monitor photodiode):



SPECTRALUS[®]

