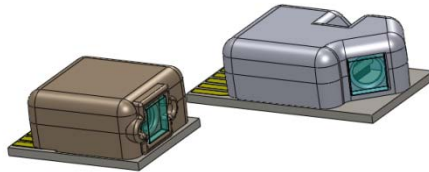


Spectralus[®] Atto Green Laser Source^(a) Models Atto-60-120-33, Atto-K-60-120-33^(b)



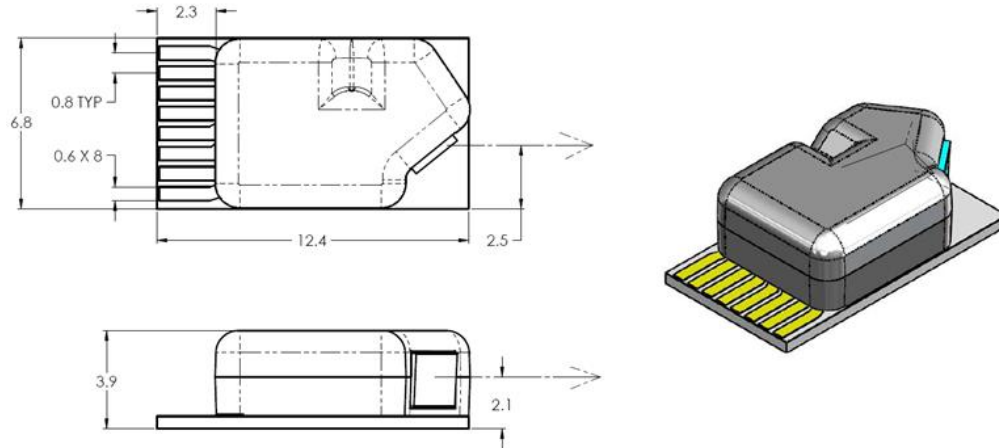
SPECIFICATIONS

						Rev 1.6
	Parameter	Symbol	Unit	Min	Typical	Max
1.0	Optical Performance					
a	Average Optical Output Power	P _o	mW		60	
c	Green Center Wavelength, Operating	λ _c	nm		532	
e	Beam Quality	M ₂			2.0	
f	Beam Waist Diameter	Hor	micron	49	63	77
		Vert		50	69	88
g	Beam Divergence	Hor	mrad	7	14	21
		Vert		9	16	23
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		0.85	
b	Laser Operating Voltage	V _o	V		1.8	
d	Nominal Operating Mode			120Hz, 33% 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-60-120-33, Atto-K-60-120-33**
 Models with other frequencies and duty cycles may be supplied per customer request.
-
- Polarization is linear and is parallel to the package base.
- BOL: beginning of life
- Atto and Atto-K lasers can be supplied with a driver board powered by the wall outlet.
- 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):

