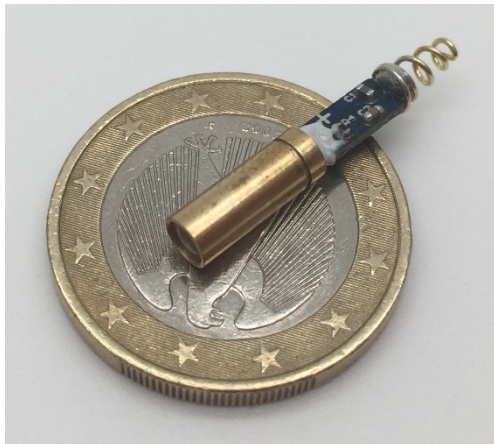


MICRO Green Laser Module

Wide Temperature Range

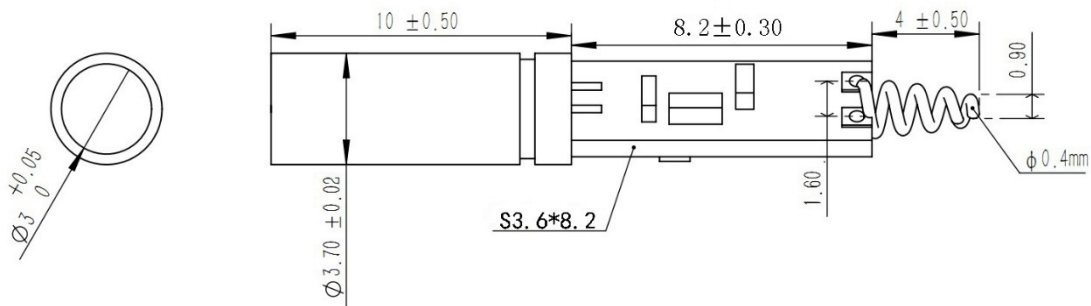


G532D003-3.71x10-2.5-X-S3

Features

- Small Size: Dia3.7x10mm
- Wide Temperature Range
- Fast Rise Time
- Reverse Voltage Protection
- High Reliability

Dimensions (Unit: mm)



Specifications				
Model Number		G532D003-3.71x10-2.5-X-S3		
Mechanical Specifications		Min	Typ	Max
Laser Head	Diameter (mm)	3.70	3.71	3.72
	Length (mm)	9.5	10.0	10.5
	Weight (g)	-	3.0	-
PCB / Driver	Width (mm)	3.5	3.6	3.7
	Length (mm)	7.9	8.2	8.5
Housing Material		Copper		
Optical Specifications		Min	Typ	Max
Wavelength (nm)		530	532	534
Average Output Power (mW)		0.1	3.0	4.9
Power Stability	at 25 °C (after max. 3 min.)	-	+/- 5%	+/- 10%
	over Temperature Range	0.1	3.0	4.9
Output Power Mode		PWM/TTL		
Laser Class		3R		

Beam Specifications		Min	Typ	Max
Beam Divergence (mrad) ⁽¹⁾		-	2.0	2.5
Beam Size at 10m (mm)		-	20	25
Beam Alignment Tolerance	Position (Δr , mm) ⁽²⁾	-	0.3	0.5
	Off-axis Angle (mrad) ⁽³⁾	-	60	100
Beam Diameter at Output Window (mm)		-	2.5	-
Beam Roundness		40%	-	100%
Beam Mode Longitude		Multi		
Beam Mode Transverse		Near TEM00		
Polarization Ratio (Linear)		-	-	100:1
M ²		-	1.5	-
Residual IR (%)		-	-	4%
Electrical Specifications		Min	Typ	Max
PCB Type		ACC-TTL-18% or 28 % or 38%		
Frequency (fixed)		111Hz		
Voltage (DC, V)		2.7	3.0	4.2
Operating Current (mA) at 3V		-	-	350
Housing Isolation		No		
ESD protection		No		
Spring's Length (mm)		4 (+/-0.5)		
Spring's Coil Diameter (mm)		0.4mm		
Spring's Plating		Copper Plating		
Reverse Voltage Protection		Yes		
Reliability		Min	Typ	Max
Operating Case Temperature Range (°C)	A	0	25	40
	B	-10	25	50
	C	-30	25	50
Rise Time (Seconds)		-	0.2	0.5
Storage Temperature (°C)		-30	-	60
Environmental Humidity (RH, %)		5	-	85
Lifetime (hours) (MTTF at 25°C)		5,000	-	-
RoHS Compliance Declaration		Yes		

(1) Full Angle ($1/e^2$)

(2) at Output Window

(3) Full Angle

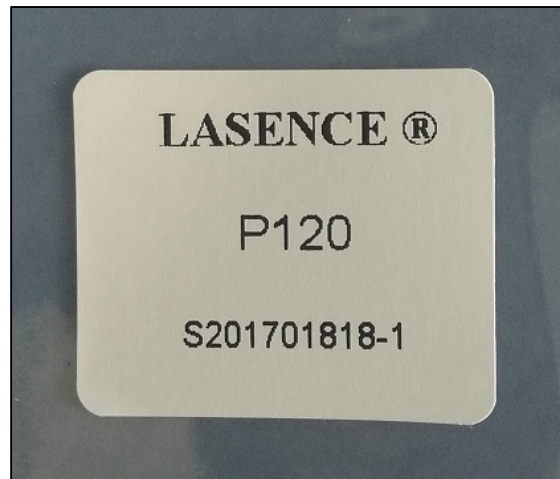
Remarks

- Model Number for placing orders: G532D003-3.71x10-2.5-X-S3
- X to be replaced by A, B, or C (temperature range)
- Datasheet Version: 1
- Output power always < 5mW
- No integrated Photo Diode
- Customer is responsible for suitable heat sinking
- Reverse Voltage Protection: 2.7-4.2V
- No heat shrink around PCB (see picture 1):
- Label on plastic bag (see example of another product's label in picture 2):
 - Lasence®
 - G532D003-3.71x10-2.5-X-S2 (X to be replaced by A, B, or C)
 - Lasence Order Number - Module Number
 - Label Length: 30mm (+/-3mm); Width: 25mm (+/-3mm)

Picture 1

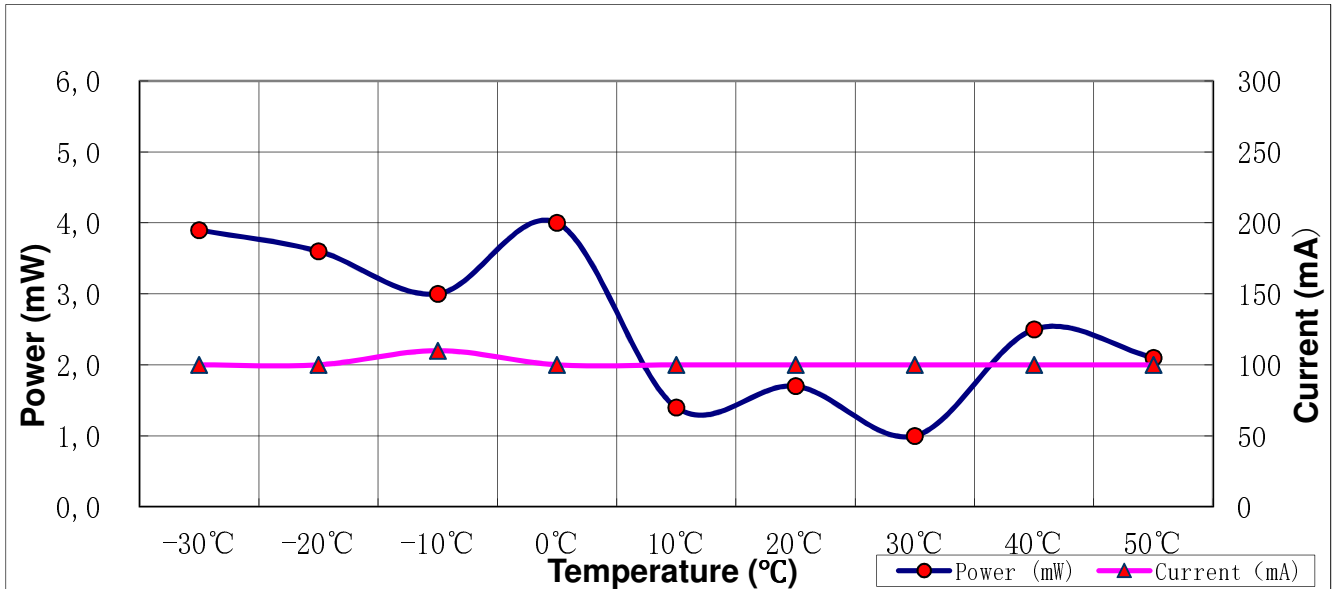


Picture 2



Typical Output Performance (examples)

1.) Power / Current vs. Case Temperature



2.) Power vs. Time (at 25°C Case Temperature)

