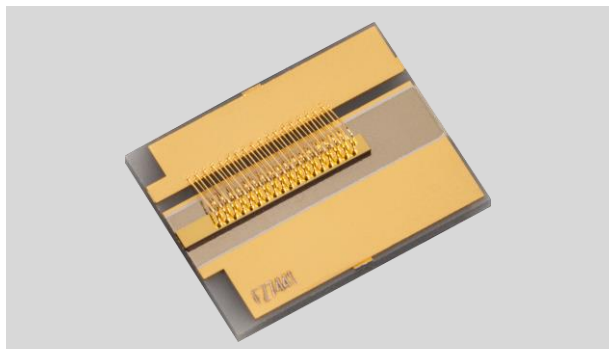


## 975nm 12W COS AuSn bonding Laser Diode Module

TY-975±05nm-12.0W-25C-COS-DG-01



SkyEra delivers TY-975 ± 05nm-12.0W-25C-COS-DG-01 chip on submount diode lasers, employing AuSn bonding and P Down package with multiple advantages of high reliability, stable output power, high power, high efficiency, long lifetime and high compatibility, and are widely applied in the market.

The performance and aging tests have been performed upon the production line to ensure reliable, stable and long lifetime of products.

To provide customers with high-quality, high cost performance products is the company's goal.

### Features:

- Chip on submount design
- P Down sealed package
- High stability
- Long lifetime
- High reliability
- AuSn bonding
- RoHS compliance

### Application:

- Medical
- Printing
- Industry
- Pumping

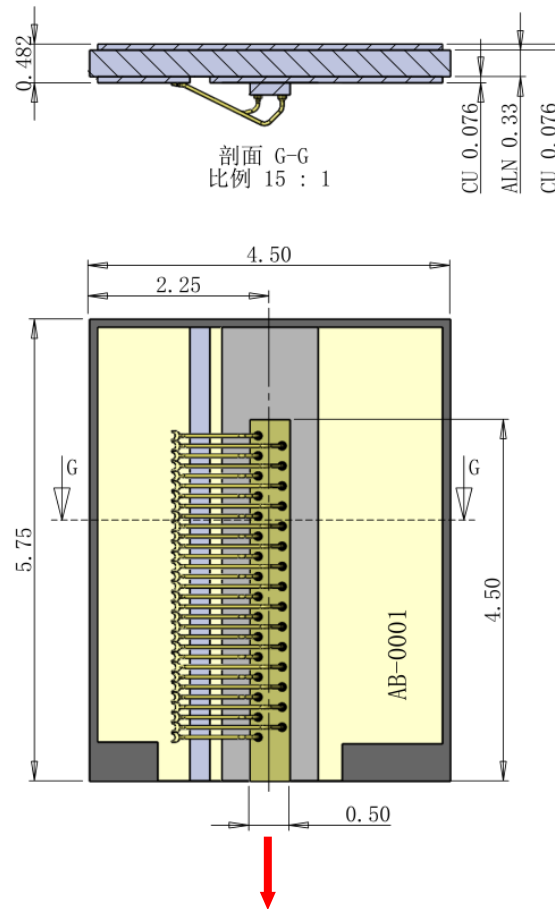
### Specification:

Functional parameters are tested at the temperature of the heat sink is 25 degree, contact resistance of the component and heat sink is less than 1 CM<sup>2</sup> K/W. Reduced lifetime if used above nominal operating conditions. A non-condensing environment is required for storage and operation below the ambient dew point.

Parameters	Min	Typ	Max	Unit	Conditions
Output Power	-	12	-	W	
Center Wavelength Kylin-9xx	973	978	983	nm	Applied to wavelength stabilized.
Spectral Width (FWHM)	-	3.5	-	nm	
Spectral Width (90%)	-	6.0	-	nm	
Fast-Axis Divergence (95%)	-	60	-	°	
Fast-Axis Divergence (FWHM)	-	26	-	°	
Slow-Axis Divergence (95%)	-	9	-	°	
Slow-Axis Divergence (FWHM)	-	6	-	°	
Polarization Mode TE/TM	-	95	-	%	
Wavelength Tuning vs. Temperature	-	0.3	-	nm/°C	
Emitter Size	-	100	-	μm	
Threshold Current	-	0.7	-	A	
Operating Current	-	11.9	12.5	A	
Operating Voltage	-	1.60	2.0	V	
Power Conversion Efficiency	-	60	-	%	
Slop Efficiency	-	1.05	-	W/A	
Storage Temperature	0	-	80	°C	
Operating Temperature	15	-	55	°C	
Apparent Size	4.5x5.75x0.482			mm	

## 2. Package Dimension

Unit: MM

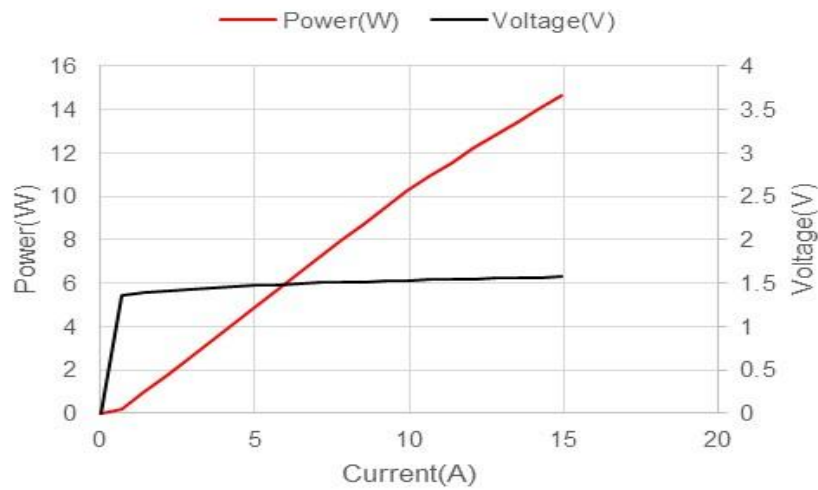


## 3. Instructions

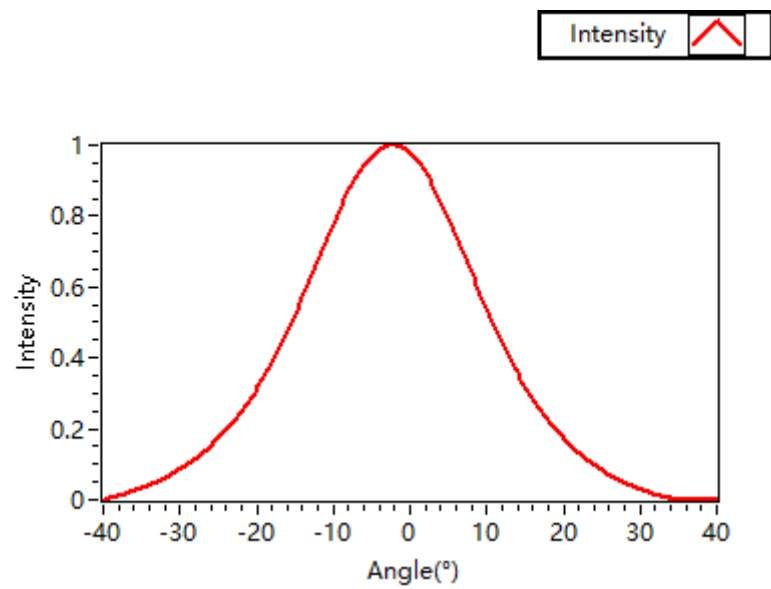
- Avoid eyes or skin exposure to direct or scattered radiation;
- ESD protection is required for transportation, storage and operation;
- Max soldering temperature is 260℃;
- Drive constant current power supply by laser and avoid surge while working;
- Operate under rated current and rated power;
- Good heat dissipation is required;
- Operating temperature is 15℃~55℃;
- Storage temperature is 0℃~+80℃.



- LIV



- FA



- SA

