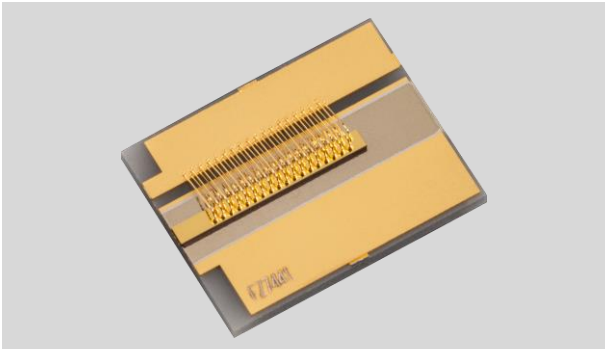


975nm 42W COS AuSn bonding Laser Diode Module

TY-975±10nm-42.0W-25C-COS-SIC-01



SkyEra delivers TY-975±10nm-42.0W-25C-COS-SIC-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

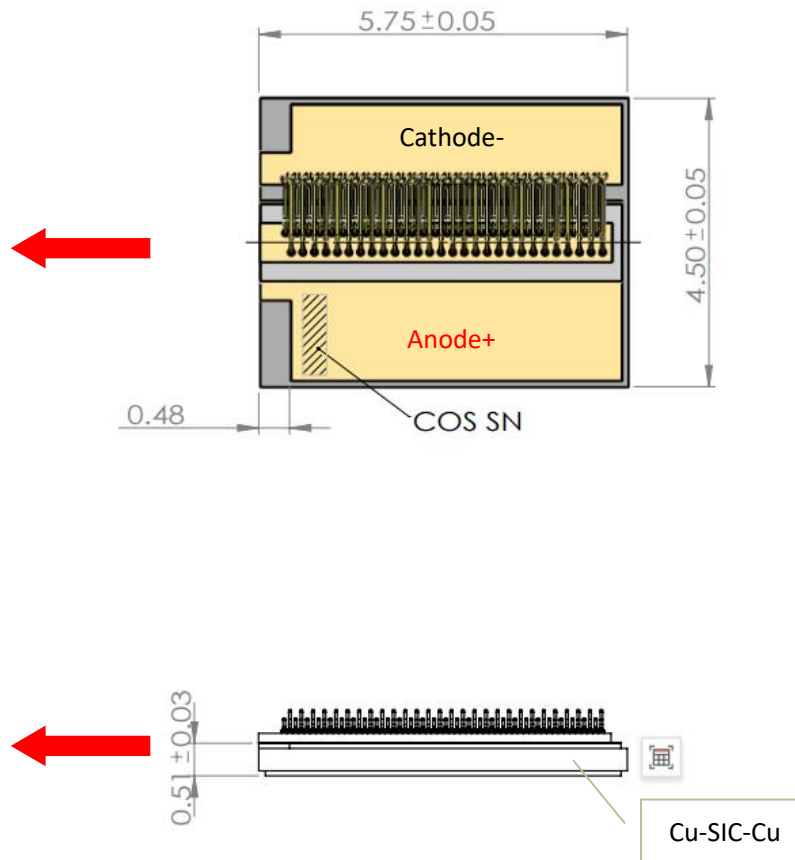
Specification:

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 CM² 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	-	42	-	W	20%,200Hz,50A
Center Wavelength COS	965	975	985	nm	
Center Wavelength@9A	959	962	965	nm	20%,200Hz
Spectral Width (FWHM)	-	3.5	-	nm	
Spectral Width (90%)	-	6	-	nm	
Fast-Axis Divergence(86.5%)	-	52	-	°	
Fast-Axis Divergence (FWHM)	-	27	-	°	
Slow-Axis Divergence (86.5%)	-	10	-	°	
Slow-Axis Divergence (FWHM)	-	9	-	°	
Polarization Mode TE/TM	94	96	-	%	
Wavelength Tuning vs. Temperature	-	0.35	-	nm/°C	
Wavelength Tuning vs. Current	-	0.27	-	nm/A	
Emitter Size	-	290	-	μm	
Threshold Current	-	2.2	-	A	
Operating Current	-	42	44	A	
Operating Voltage	-	1.56*	1.7*	V	*Fixture influence
Power Conversion Efficiency	-	60	-	%	
Slop Efficiency	-	1.01	-	W/A	
Storage Temperature	0	-	80	°C	
Operating Temperature	15	-	55	°C	
Apparent Size	4.5x5.75x0.51			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°C;
- 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°C~55°C, Avoid use in Condensing Environment;
- Storage temperature is 0°C~+80°C, Humidity 0-85%,ESD<500V.

