

## CK05(450-80)G48A

SKU / Spec Number: E005

### DESCRIPTION

The instrumental quality CK laser module has been designed specifically to address the needs of high-end OEM applications requiring superior optical quality and ultra-stable wavelength and output powers. The CK features an onboard microprocessor allowing for advanced integration and user control. To promote stability of wavelength and output powers, a precision current source as well as a precision temperature control has been incorporated in the module. The low operating voltage helps to create less heat waste increasing diode lifetime, efficiency, and reliability. The mechanical design of the CK allows users to replace more expensive lasers without sacrificing performance.

### SPECIFICATIONS

Wavelength (nm)	450	Polarization Ratio	>100:1
Wavelength Tolerance	5nm	Polarization State	Linear
Certifications	CDRH & IEC Laser Safety	Beam Pointing Stability	<5μRad/°C
Power	5	Operating Mode	CW, Digital, or Analog Modulation
Warranty	1 Year	Modulation Signal	Analog / Digital
Power Units	mW	Modulation Input Impedance	Digital 50 Ohms AC / Analog 500 Ohms
Pwr Stability Over Temp Rng	<1% / 8hr	Max Modulation Rate Analog	0.8nS Min / 2nS Typ / 6nS Max (diode dependent)
Noise RMS (10Hz – 100MHz)	<0.5%	Rise/fall times analog (ns)	10nS Min / 24nS Typ / 200nS Max (diode dependent)
Color	Blue	Propagation Delay (ns)	Digital 30-50ns / Analog 20-40ns
Beam Shape	Elliptical	Operating Voltage	8
Default Optical Configuration	Focused at 5 feet	Operating Voltage Units	VDC
User Focusable	Yes	Max Operating Current (mA)	4000 max/ 800 typical
Beam Divergence (1/e2)	>1mRad	Operating Current Units	mA
Spatial Mode	Single	Product Weight (lbs.)	0.65
Transverse Mode Structure	TEM <sub>00</sub>	Platform	CK