

# APC Laser Diode™

## ADX-6305STB2

Perfect Solution For Auto Power Controlled Laser Diode

6-2D-LD63-021\_Rev.01

By converting the external APC circuit board into an ASIC, we package the APC circuit into a traditional TO-can together with the laser chip. From now on, single package APC function included laser diode is realized.

Powered with Arima's proprietary **APC Laser Diode™** technology, **ADX-6305STB2** is your perfect solution for the stable light power output, compact size, high brightness laser light source.

### Features:

1. 635nm 5mW 40°C high reliable operation
2. Saving space and cost of laser module
3. Voltage driven LD, easy to use
4. Highly stable laser output power



### Applications:

1. High precision measuring instruments
2. High precision industrial makers
3. Survey and engineering instruments

### ADX-6305STB2 Electrical-Optical Characteristics @T<sub>c</sub>=25°C:

Item	Symbol	Min.	Typ.	Max	Unit	Condition
Wavelength	$\lambda$	630	635	640	nm	P <sub>o</sub> =5mW
Operation current	I <sub>op</sub>	-	32	40	mA	P <sub>o</sub> =5mW
Variable resistor	VR	3	9	10	KΩ	V <sub>cc</sub> =3V
Parallel divergence angle	$\theta_{\parallel}$	6	8	11	Deg	P <sub>o</sub> =5mW
Perpendicular divergence angle	$\theta_{\perp}$	30	33	40	Deg	
Parallel FFP deviation angle	$\Delta\theta_{\parallel}$	-2.0	0	+2.0	Deg	
Perpendicular FFP deviation angle	$\Delta\theta_{\perp}$	-2.0	0	+2.0	Deg	
Emission point accuracy	$\Delta x \Delta y \Delta z$	-80	0	+80	um	-
Power-Temp stability (25~40°C)	$\Delta P_{oT}$	-20	-10	0	%	P <sub>o</sub> =5mW, V <sub>cc</sub> =3.0V
Power-V <sub>cc</sub> stability (3.0~2.5V)	$\Delta P_{oV}$	-15	-10	0	%	P <sub>o</sub> =5mW, Temp=25°C

### Maximum Ratings:

Item	Symbol	Rating	Unit
Power supply voltage	V <sub>cc</sub>	2.5-6.0*	V
Laser optical output power	P <sub>o</sub>	7.0	mW
Operation temperature	T <sub>opr</sub>	-10 ~ +40	°C
Storage temperature	T <sub>stg</sub>	-40 ~ +85	°C

\* Effective heat sink is recommended on 6V case due to extra heat.

\* For reference only. Contents above are subject to change without notice.

### Contact

For US, Canada	Ayase America Inc.	e-mail: <a href="mailto:info@ayaseamerica.com">info@ayaseamerica.com</a>	+1-408-988-5277
For EU	Ayase Europe GmbH	e-mail: <a href="mailto:info@ayase-europe.de">info@ayase-europe.de</a>	+49-0-6122-533-811
For Japan	Ayase Co., Ltd.	e-mail: <a href="mailto:info@ayasecorporation.com">info@ayasecorporation.com</a>	+81-45-532-9501

