

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-6305SGB2** 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-6305SGB2 Electrical-Optical Characteristics @T_c=25°C:

Item	Symbol	Min.	Typ.	Max	Unit	Condition
Wavelength	λ	630	635	640	nm	P _o =5mW
Operation current	I _{op}	-	33	45	mA	P _o =5mW
Variable resistor	VR	3	6	10	K Ω	V _{cc} =3V
Parallel divergence angle	θ_{\parallel}	6	8	12	Deg	P _o =5mW
Perpendicular divergence angle	θ_{\perp}	30	33	40	Deg	
Parallel FFP deviation angle	$\Delta \theta_{\parallel}$	-3.0	0	+3.0	Deg	
Perpendicular FFP deviation angle	$\Delta \theta_{\perp}$	-3.0	0	+3.0	Deg	
Emission point accuracy	$\Delta x \Delta y \Delta z$	-80	0	+80	um	-
Power-Temp stability (25~40 °C)	ΔP_{oT}	-20	-10	0	%	Po=5mW,Vcc=3.0V
Power-V _{cc} stability (6.0~3.0V)	ΔP_{oV}	-15	-10	0	%	Po=5mW,Temp=25 °C
Power-V _{cc} stability (3.0~2.5V)	ΔP_{oV}	-15	-10	0	%	Po=5mW,Temp=25°C

Maximum Ratings:

Item	Symbol	Rating	Unit
Power supply voltage	V _{cc}	2.5-6.0	V
Laser optical output power	P _o	7.0	mW
Operation temperature	T _{opr}	-10 ~ +40	°C
Storage temperature	T _{stg}	-40 ~ +85	°C

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

