

APC Laser Diode™

Perfect Solution For Auto Power Controlled Laser Diode

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.

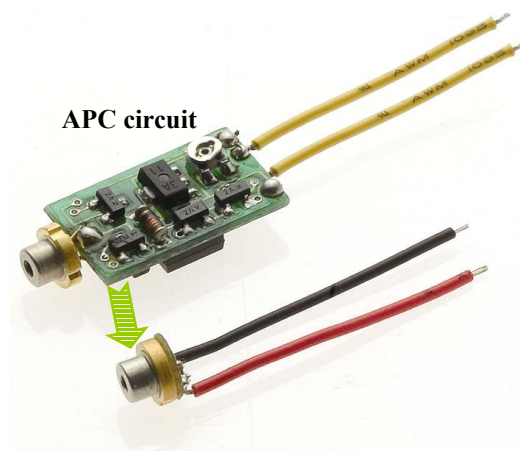
Powered with Arima's proprietary **APC Laser Diode™** technology, **ADL-65075TA2** is your perfect solution for the stable light power output, compact size, high brightness laser light source.

Features:

1. 5.6mm package and 650nm 7mW 70°C operation
2. Low operation current
3. Saving space and cost of laser module
4. Voltage driven LD, easy to use

Applications:

1. General purpose red laser light source
2. Laser pointer
3. Industrial laser markers / measuring instruments



ADL-65075TA2 Electrical-Optical Characteristics @T_c=25°C:

Item	Symbol	Min.	Typ.	Max	Unit	Condition
Wavelength	λ	645	655	660	nm	P _o =7mW
Operation current	I _{op}	-	27	35	mA	P _o =7mW
Variable resistor	VR	1	3.5	8	K Ω	V _{cc} =3V
Parallel divergence angle	θ_{\parallel}	6	9	12	Deg	P _o =7mW
Perpendicular divergence angle	θ_{\perp}	25	30	32	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 (25~70 °C)	ΔP_{oT}	-20	-10	0	%	Po=7mW,Vcc=3.0V
Power-V _{cc} stability (6.0~3.5V)	ΔP_{oV}	-15	-10	0	%	Po=7mW,Temp=25°C
Power-V _{cc} stability (3.0~2.5V)	ΔP_{oV}	-15	-10	0	%	Po=7mW,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	10	mW
Operation temperature	T _{opr}	-10 ~ +70	°C
Storage temperature	T _{stg}	-40 ~ +85	°C

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

