



American Opto Plus LED Corp.
0.56" Case Mold Type LED Display
A561YG G/W
C561YG G/W

● **EDIT HISTORY**

Version A: Nov. 05, 2013

Preliminary Spec.

Version B: July 29, 2014

Included pin thickness under mechanical dimensions.

Manufacture	Examination	Approving



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● **FEATURES**

- 0.56 inch (14.2 mm) Digit Height.
- Low current operation.
- Case mold type.
- Gray face, White segment.
- RoHS compliant, Pb Free.

● **DESCRIPTION**

The A561YG G/W & C561YG G/W is a 0.56 inch (14.2 mm) height single 7-segment display.

This device utilizes Super Bright Yellow Green LED chip which are made from AlGaInP on a transparent GaAs substrate. The display has Gray face, White segment.

● **DEVICE**

PART NO	DESCRIPTION
Super Bright Yellow Green	
A561YG G/W	Common Anode
C561YG G/W	Common Cathode

RoHS Compliance



Pb free.





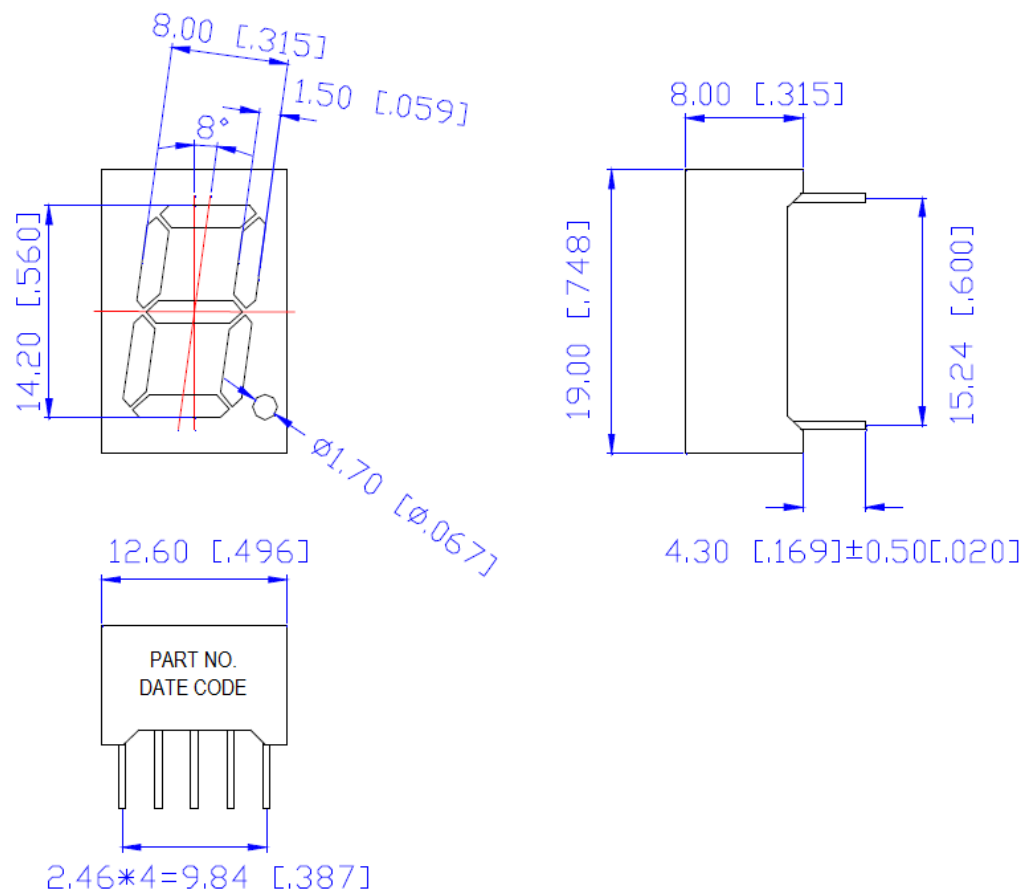
American Opto Plus LED Corp.

0.56" Case Mold Type LED Display

A561YG G/W

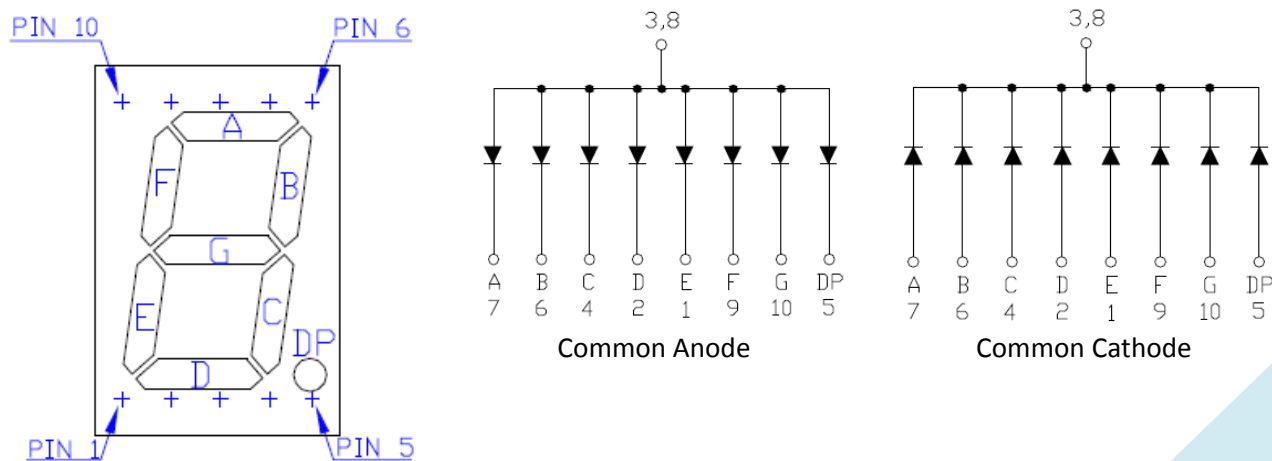
C561YG G/W

● MECHANICAL DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerances are ± 0.25 mm unless otherwise noted. All pins are $\text{Ø}0.51[.020] \pm 0.1[.004]$

● TYPICAL INTERNAL EQUIVALENT CIRCUIT





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● **YG: SUPER BRIGHT YELLOW GREEN (AlGaInP/GaAs)**

ABSOLUTE MAXIMUM RATING AT Ta=25°C

Parameter	Symbol	Super Bright Yellow Green	Unit
Power dissipation per dice	P _{AD}	70	mW
Derating liner from 25°C per dice	-	0.33	mA / °C
Continuous forward current per dice	I _{AF}	25	mA
Peak current per dice (duty cycle 1/10, 1kHz)	I _{PF}	90	mA
Reverse voltage per dice	V _R	5	V
Operating temperature	T _{OPR}	-35 to +85	°C
Storage temperature	T _{STG}	-35 to +85	°C

ELECTRICAL - OPTICAL CHARACTERISTICS AT Ta=25°C

Characteristic	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward voltage per segment	V _F	I _F =20mA	-	2.0	2.8	V
Reverse current	I _R	V _R =5V	-	-	100	μA
Peak wavelength	λ _P	I _F =20mA	-	572	-	nm
Dominant wavelength	λ _D	I _F =20mA	566	570	574	nm
Luminous intensity per segment	I _V	I _F =20mA	-	12	-	mcd
Spectral radiation bandwidth	Δλ	I _F =20mA	-	20	-	nm



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● TYPICAL ELECTRICAL CHARACTERISTICS CURVES (Ta=25°C)

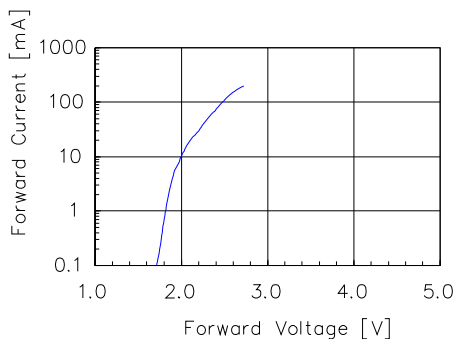


Fig 1. Forward Current vs. Forward Voltage

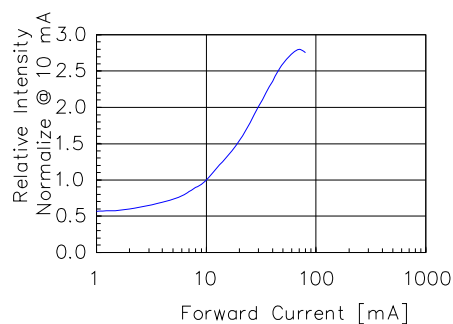


Fig 2. Relative Intensity vs. Forward Current

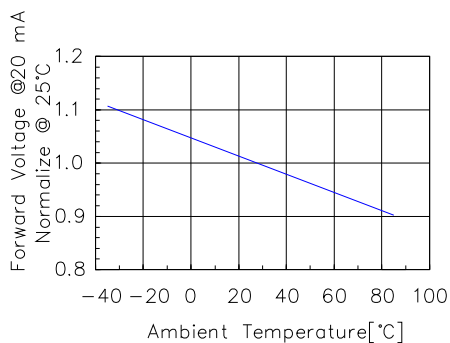


Fig 3. Forward Voltage vs. Temperature

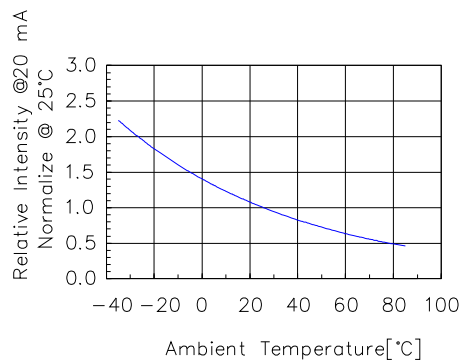


Fig 4. Relative Intensity vs. Temperature

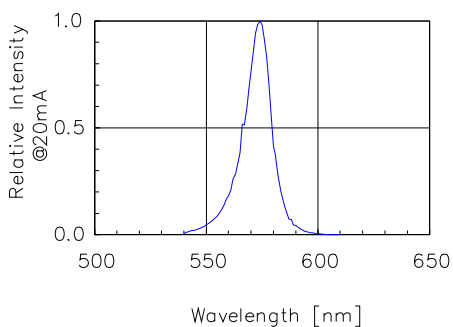
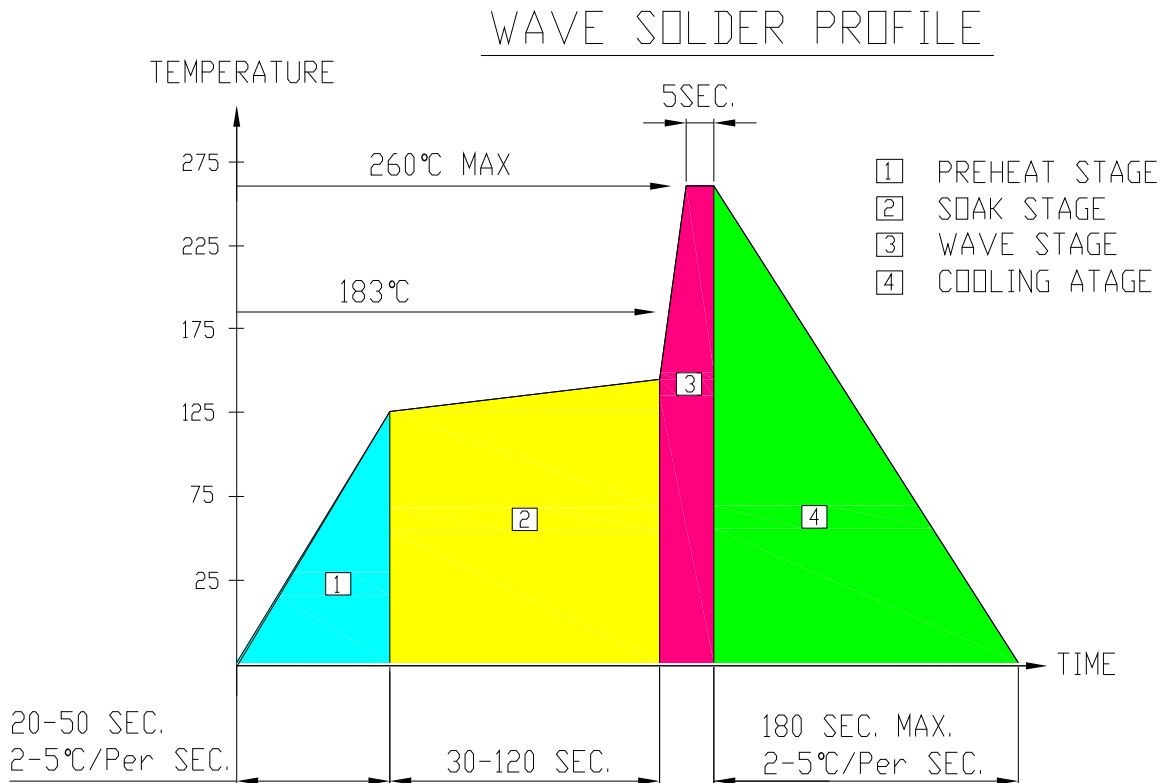


Fig 5. Relative Intensity vs. Wavelength



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● **RECOMMEND SOLDERING PROFILE**



● **SOLDERING IRON**

Basic spec is ≤ 4 sec when 260°C. If temperature is higher, time should be shorter (+10°C → 1 sec). Power dissipation of Iron should be smaller than 15W, and temperature should be controllable. Surface temperature of the device should be under 230°C.

● **REWORK**

Customer must finish rework within ≤ 4 sec under 245°C.