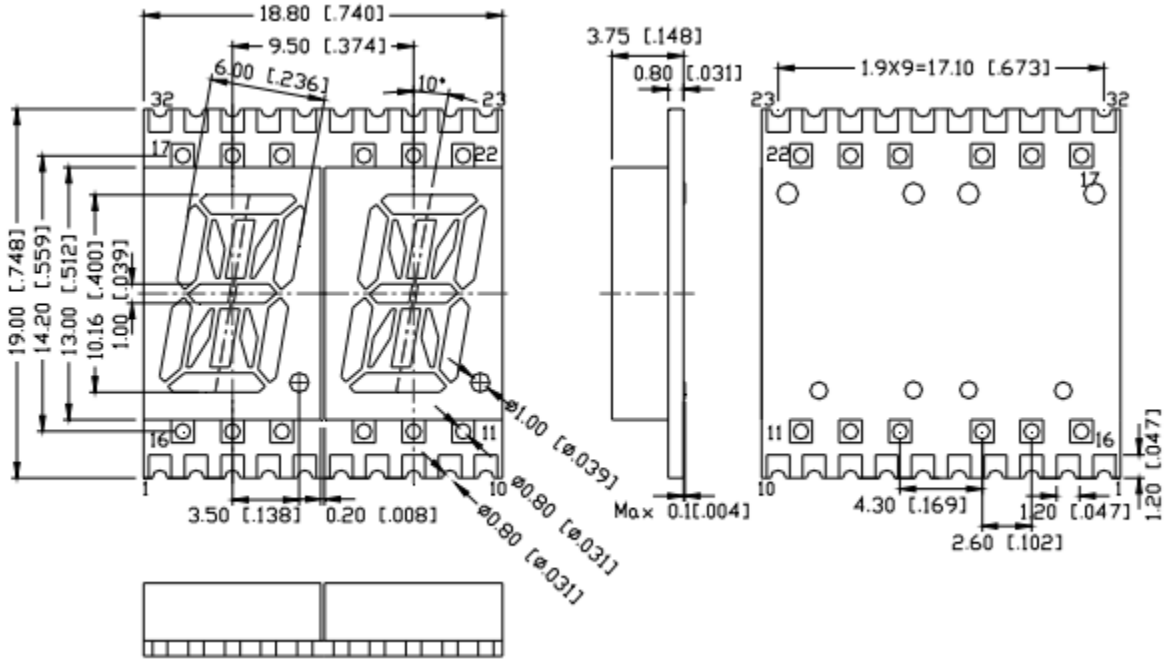
American Opto Plus LED Corp.
SMA4028YG-C G/W
0.4” Yellow Green Dual Digit Alphanumeric SMD Display

MECHANICAL DIMENSIONS

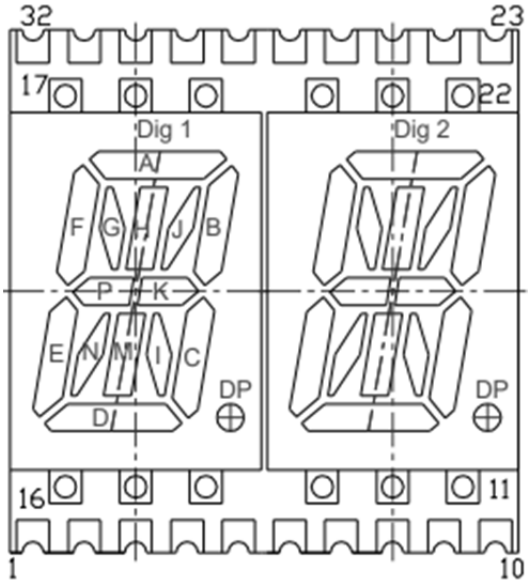


Notes:

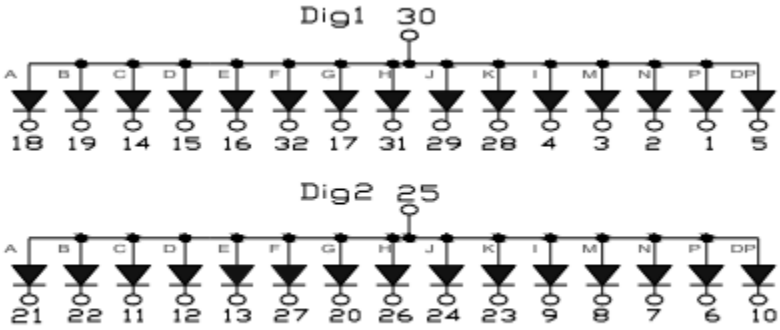
1. Dimension in millimeter [inch], tolerance is ±0.25 [0.10] and the angle is ±1% unless otherwise noted.
2. Bending ≤ Length*1%.

Chip Material	Emitted Color	Segment/Face	Description
AlGaInP	Yellow Green	White/Gray	Common Anode

ALL LIGHT ON SEGMENTS FEATURE



INTERNAL CIRCUIT DIAGRAMS



Common Anode

ABSOLUTE MAXIMUM RATING **(Ta=25°C)**

Parameter	Symbol	Rating	Unit
Power Dissipation (Per Dice)	PD	70	mW
Continuous Forward Current (Per Dice)	IF	25	mA
Peak Current (Per Dice, duty cycle 1/10,1KHz)	IFP	90	mA
Derating Liner from 25°C(Per Dice)	ΔIF/ΔT	0.33	mA/°C
Reverse Voltage (Per Dice)	VR	5	V
Electrostatic discharge(HBM)	ESD	--	V
Operating Temp.	TOPR	-40 ~ +105	°C
Storage Temp.	TSTG	-40 ~ +105	°C

ELECTRO-OPTICAL CHARACTERISTICS **(Ta=25°C)**

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage (Per Dice)	VF	IF=20mA	--	2.0	2.8	V
Dominant Wavelength	λd	IF=10mA	--	570	--	nm
Peak Wavelength	λp		--	572	--	nm
Luminous Intensity Matching Ratio	IV-m		--	--	2:1	--
Luminous Intensity (Per Segment)	IV		--	3	--	mcd
Reverse Current	Ir	VR=5V	--	--	100	μA

LUMINOUS GENERAL LV BIN GRADE **(I_f = 10mA)**

Bin	Min	Max	Unit
F	1.641	2.626	mcd
G	2.627	4.203	
H	4.204	6.726	

Notes: Tolerance: ±20%

COLOR RANK LIMITS **(I_f = 10mA)**

Bin	Min	Max	Unit
0	567.5	569.4	nm
1	569.5	570.4	
2	570.5	571.4	
3	571.5	572.9	
4	573.0	575.0	

Notes: Tolerance: ±1nm

ELECTRICAL/OPTICAL CHARACTERISTICS CURVES

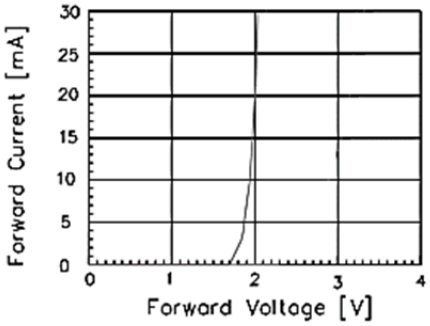


Fig 1. Forward Current vs. Forward Voltage

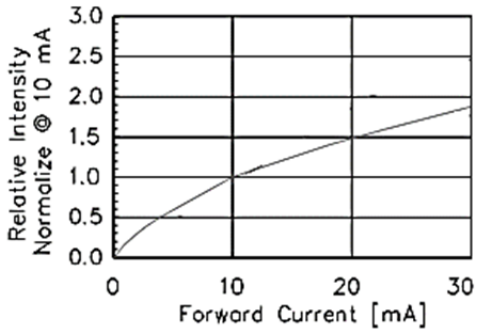


Fig 2. Relative Intensity vs. Forward Current

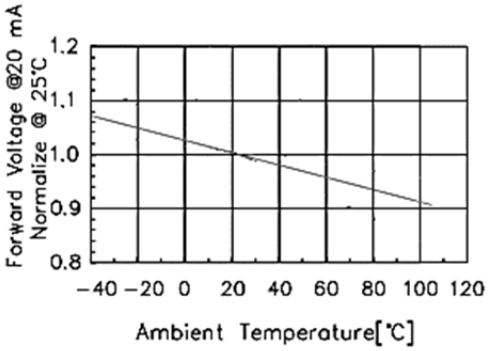


Fig 3. Forward Voltage vs. Temperature

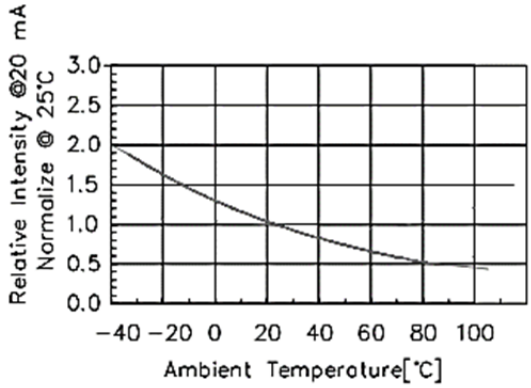


Fig 4. Relative Intensity vs. Temperature

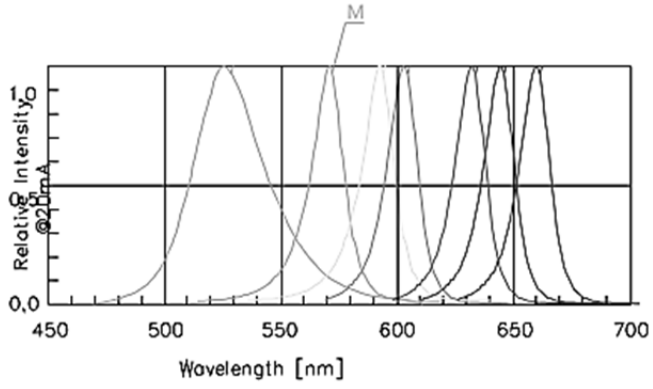


Fig 5. Relative Intensity vs. Wavelength

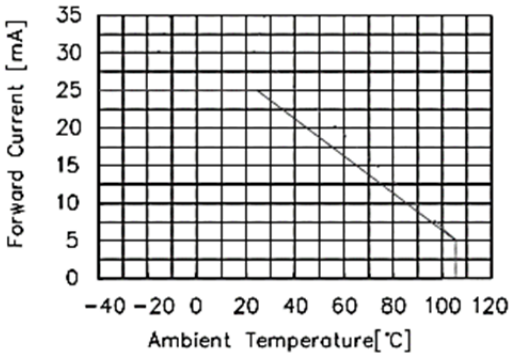
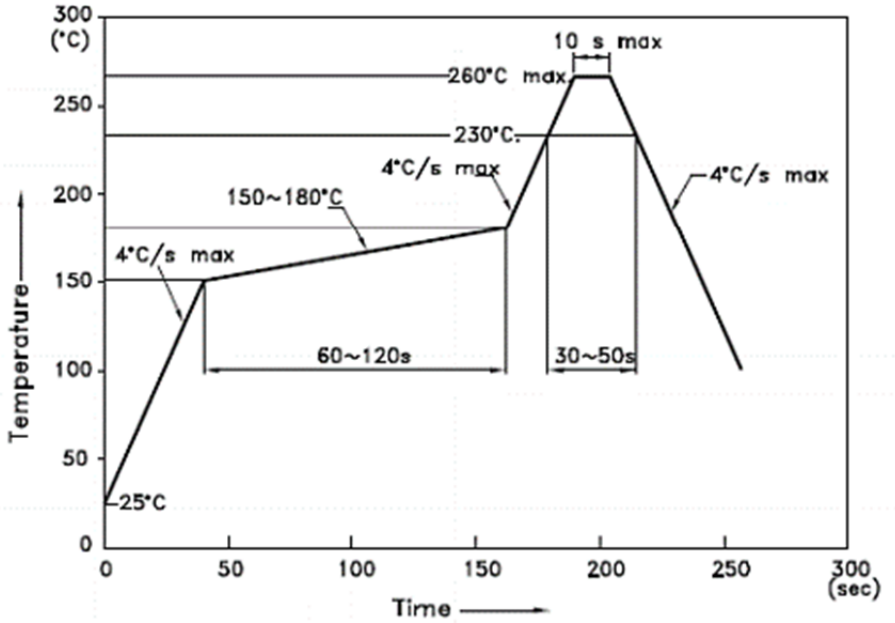


Fig 6. Forward current vs. Temperature

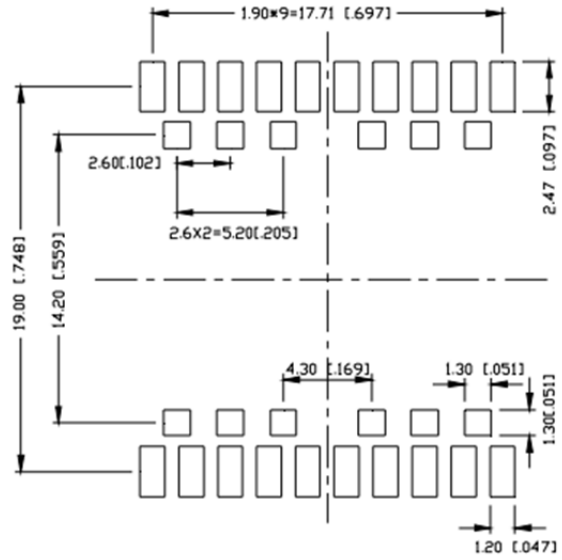
REFLOW SOLDERING CONDITION

IR Reflow Temperature/ Time

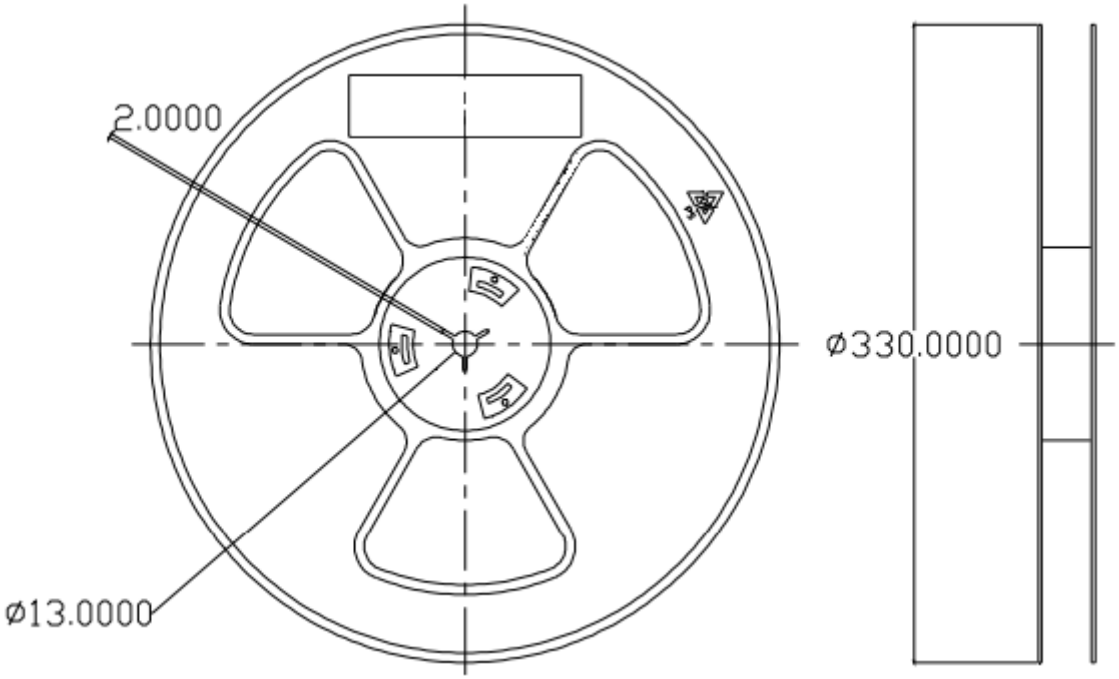


1. We recommend the reflow temperature is 245°C ± 5°C.
2. The maximum soldering temperature should be limited to 260°C.
3. Do not cause any stress to the epoxy resin while it is exposed to the high temperature.
4. Number of reflow process shall be 2 times or less.

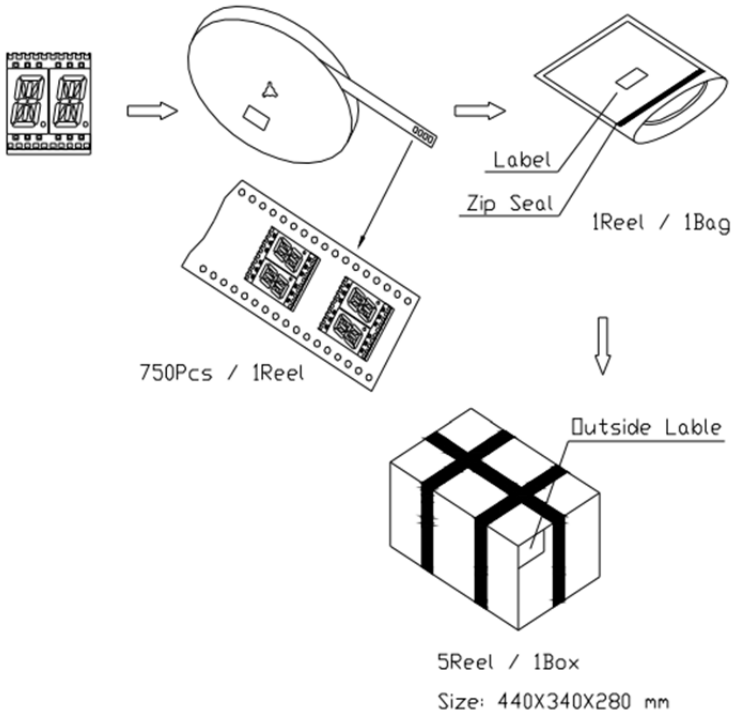
RECOMMENDED PCB LAYOUT



REEL DIMENSION



PACKING & LABEL DIMENSIONS



Note: specifications are subject to change without notice. Please contact us for the updated information.