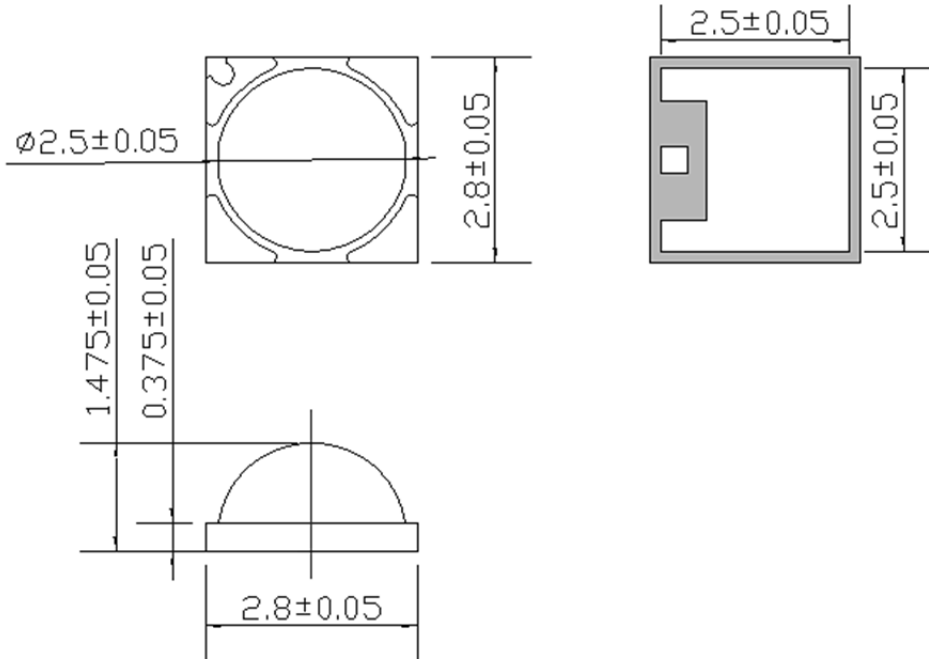




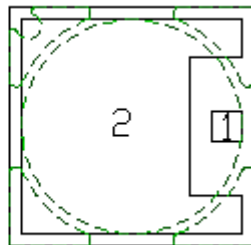
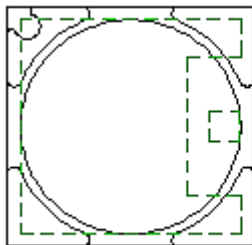
American Opto Plus LED Corp. L990D-MYC

2.8 x 2.8 x 1.5 mm Dome Lens Yellow Power LED

PACKAGE OUTLINES



PAD CONFIGURATION



PAD	Function
1	Cathode
2	Anode, Thermal

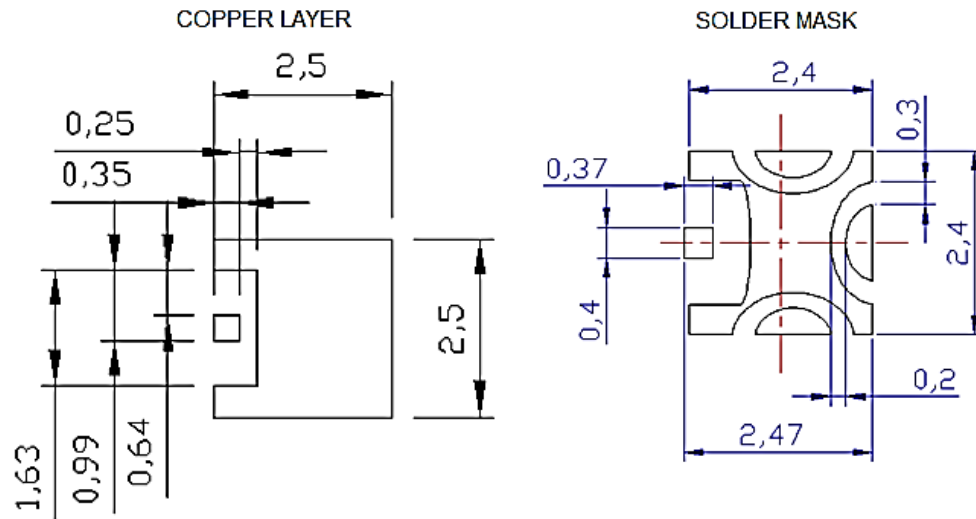


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RECOMMENDED SOLDER PATTERN





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ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

Parameter	Symbol	Value	Unit
Forward Pulse Current*	I _{FP}	500	mA
Power Dissipation	P _D	1.05	W
Thermal Resistance, Junction-Case	R _{th, J-C1}	5	°C/W
Reverse Voltage	V _R	5	V
LED Junction Temperature	T _J	125	°C
Operating Temperature Range	T _{OPR}	-40~+80	°C
Storage Temperature Range	T _{STG}	-40~+120	°C
Soldering Condition	T _{SOL}	260°C for 5 seconds	

*Note: Forward Pulse Current=1/10 Duty Cycle, 400msec Pulse Width

OPTICAL-ELECTRO CHARACTERISTICS

(Ta=25°C)

Parameter	Test Condition	Symbol	Min	Typ	Max	Unit
Forward Voltage* ¹	I _F =350mA	V _F	1.83	2.4	3.03	V
Reverse Current		I _R	--	--	100	µA
Luminous Flux* ²		Φ _V	--	40	--	Lm
Dominant Wavelength		λ _D	585	--	595	Nm

Notes:

1. Forward voltage measurement allowance is ± 0.1V.
2. Luminous Flux measurement allowance is ± 10%.



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BIN CODE LIST REFERENCE

Item	Bin Code	Symbol	Condition	Min	Max	Unit
Luminous Flux	F	Φ_v	$I_F=350\text{mA}$	30	40	Lm
	G			40	50	

Note: Luminous flux & radiant flux measurement allowance is $\pm 10\%$

Item	Code	λ Min (Nm)	λ Max (Nm)
Wavelength	A2	587	589.5
	A4	589.5	592
	A6	592	594.5

Note: Wavelength measurement allowance is $\pm 2\text{nm}$



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CHARACTERISTIC DIAGRAM

Fig. Forward Current vs. Forward Voltage

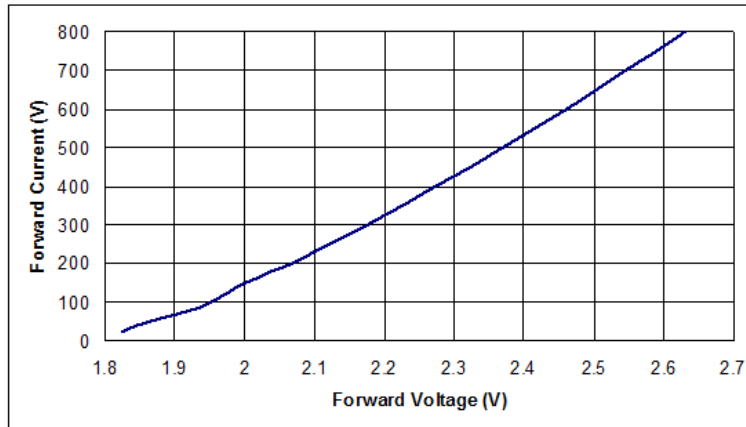


Fig. Relative Intensity vs. Forward Current

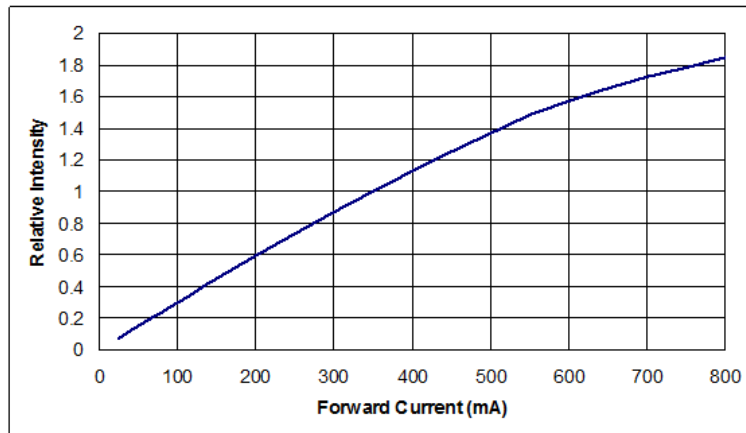
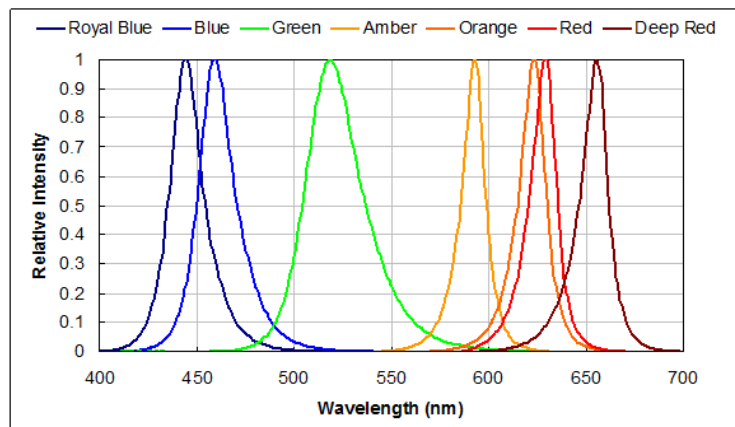


Fig. Relative Intensity vs. Wavelength



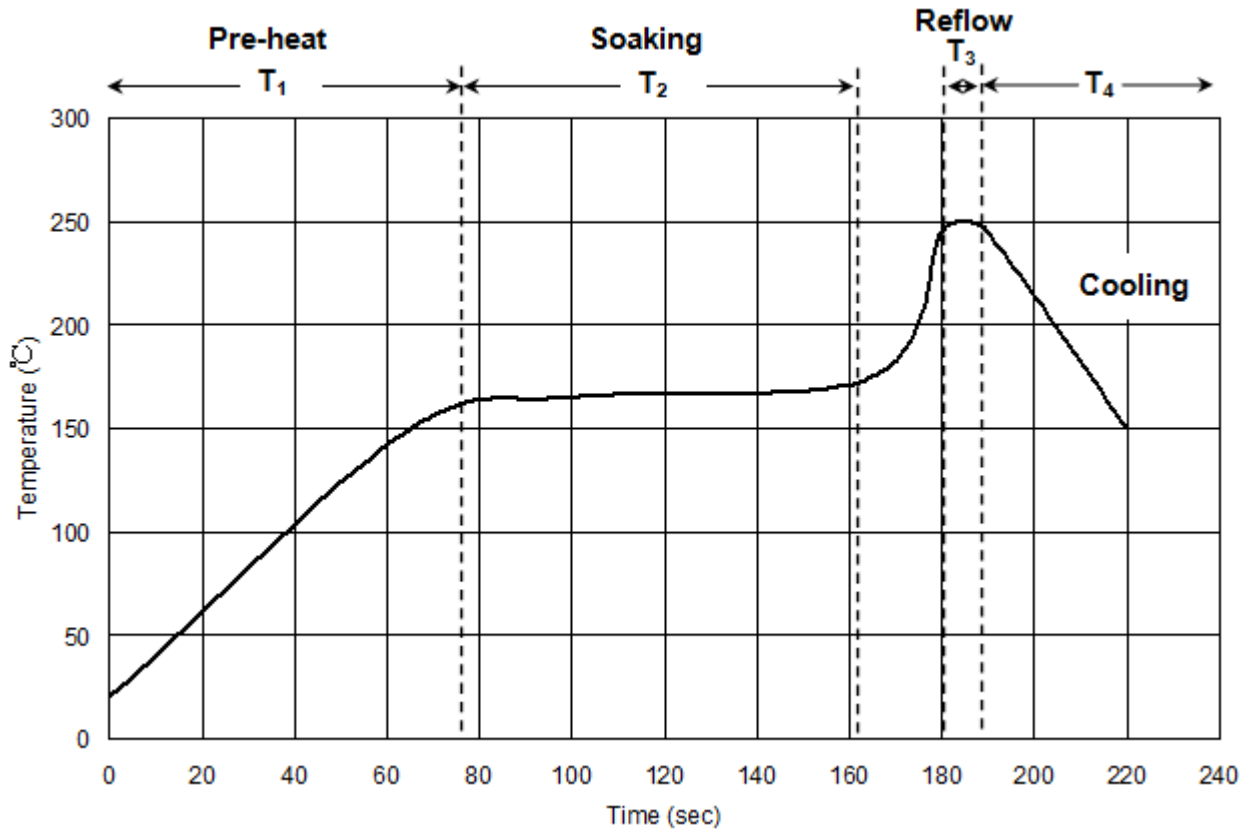


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REFLOW SOLDERING CHARACTERISTICS



T1	Ramp up rate	1.0~3.0 °C/sec
	Pre-heat time	50~80 sec
T2	Soaking temperature	155~185 °C
	Dwell time during soaking	60~120 sec
T3	Reflow temperature	240~250 °C
	Reflow time	Max 10 sec
T4	Ramp up rate during reflow	1.2~2.3 °C/sec
	Cooling	1.0~6.0 °C.sec

Note: suggest using Sn96Ag3Cu0.5 lead free solder

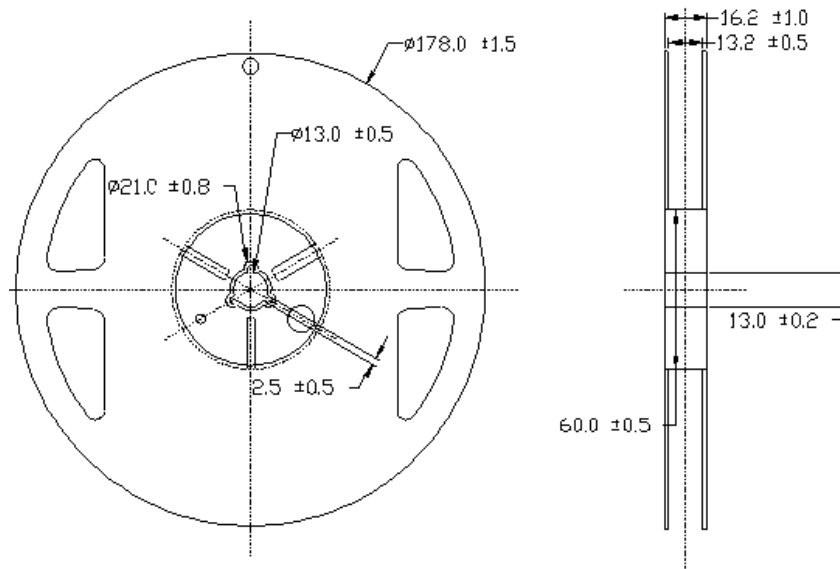
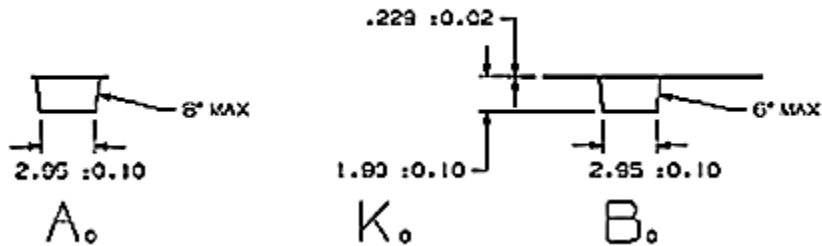
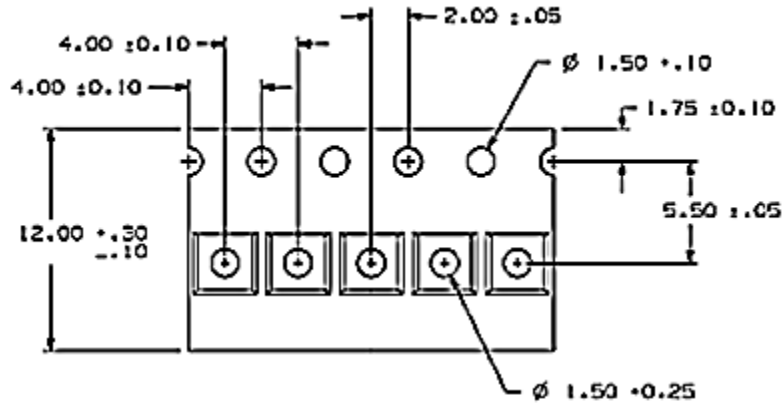


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SHIPPING PACKAGE DIMENSIONS



- Moisture proof bag
- 1 Reel/Bag
- 2000 (Max)/Reel