

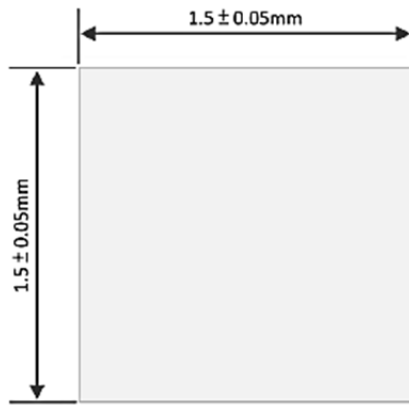


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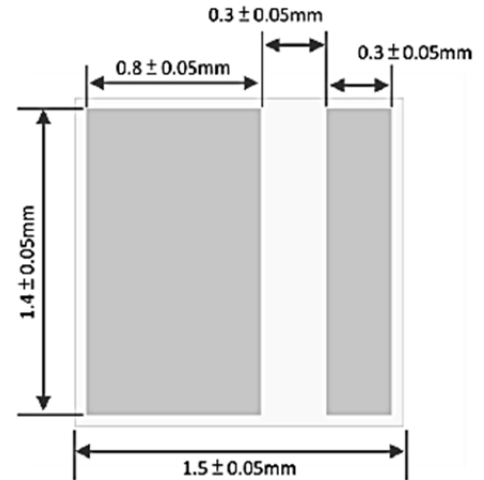
L515MPGC

1.5 X 1.5 X 1.4mm Pure GREEN Water Clear Power CSP LED

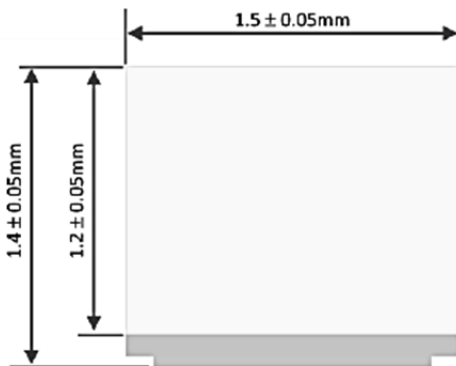
PACKAGE OUTLINES



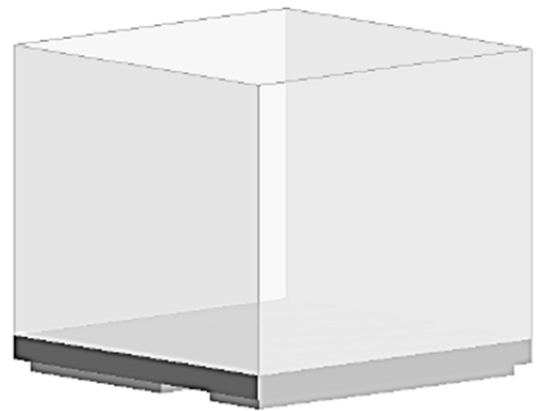
Top View



Bottom View



Side View



Notes:

1. All dimensions are in millimeters (inches);
2. Tolerances unless mentioned are $\pm 0.1\text{mm}$



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L515MPGC

1.5 X 1.5 X 1.4mm Pure GREEN Water Clear Power CSP LED

ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

Parameter	Symbol	Max Rating	Unit
Typ. Forward Current	I _F	350	mA
Max. Forward Current	I _F	500	mA
Reverse Current	V	5	V
Power Dissipation (@350mA)	P _D	1.15	W
Junction Temperature	T _J	115	°C
Operating Temperature	T _{OPR}	-40 ~ +85	°C
Storage Temperature	T _{STG}	-40 ~ +100	°C
Recommended Soldering Temperature	T _{SOL}	240	°C
Thermal Resistance	θ _{th}	4	°C/W
Allowable Reflow Cycles	-	3	Cycles
ESD Sensitivity	HBM	±2000	V

OPTICAL-ELECTRICAL CHARACTERISTICS

(Ta=25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Luminous Flux	Φ _V	350mA	--	80	--	Lm
Wavelength	λ	350mA	520	--	530	nm
Forward Voltage	V _F	350mA	3.0	3.3	--	V
Thermal Resistance	Rθ _{J-C}	350mA	--	4	--	°C/W

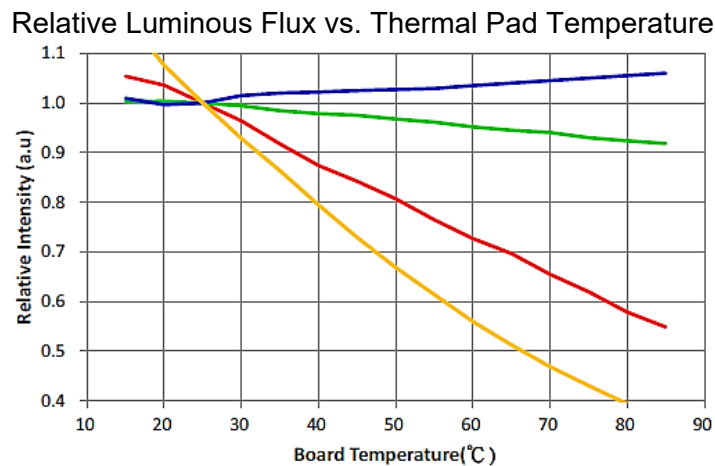
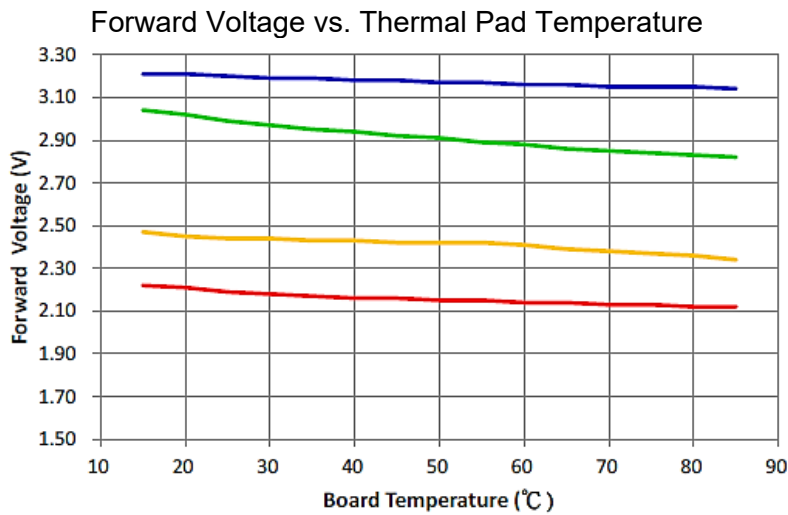
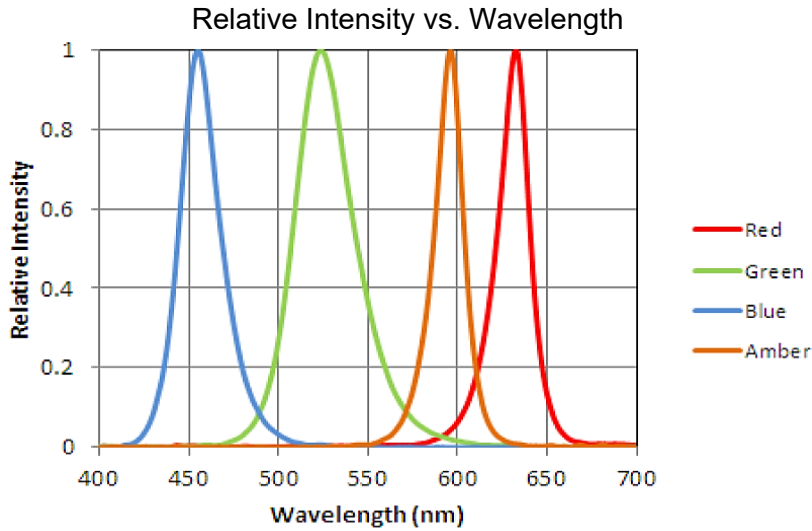


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OPTICAL-ELECTRICAL CHARACTERISTICS



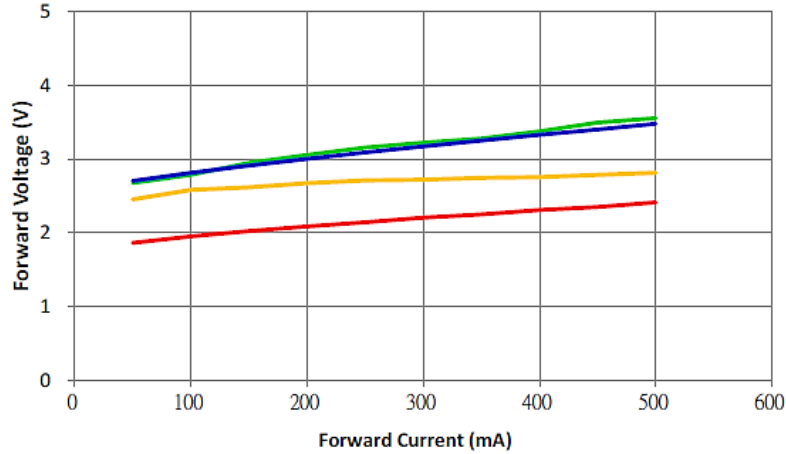


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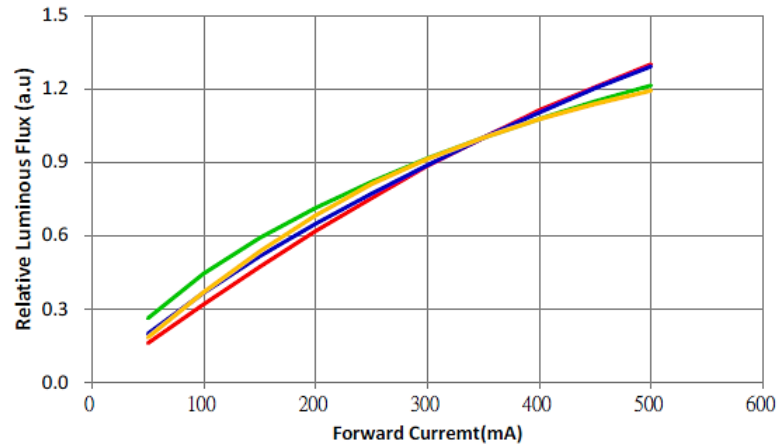
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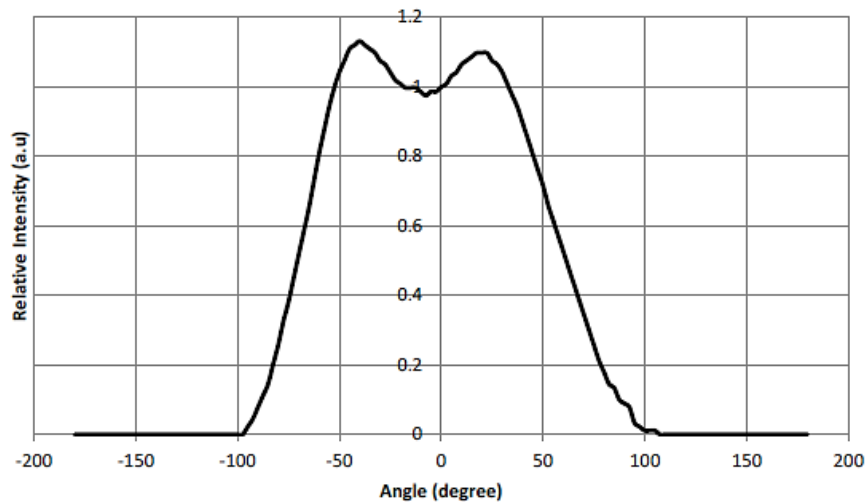
Forward Voltage (V) vs. Forward Current (mA)



Relative Luminous Flux (a.u) vs. Forward Current (A)



Relative Intensity (a.u) vs. Angle (degree)



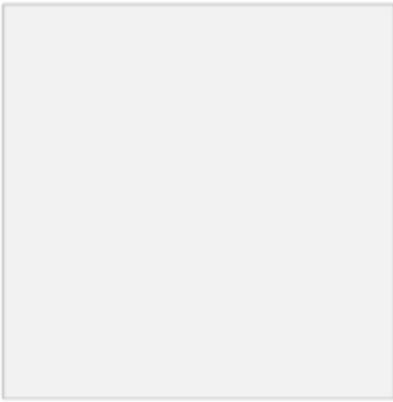


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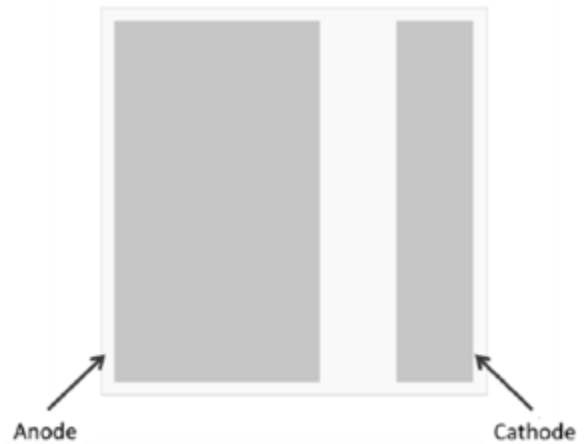
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RECOMMENDED SOLDERING PAD PATTERN

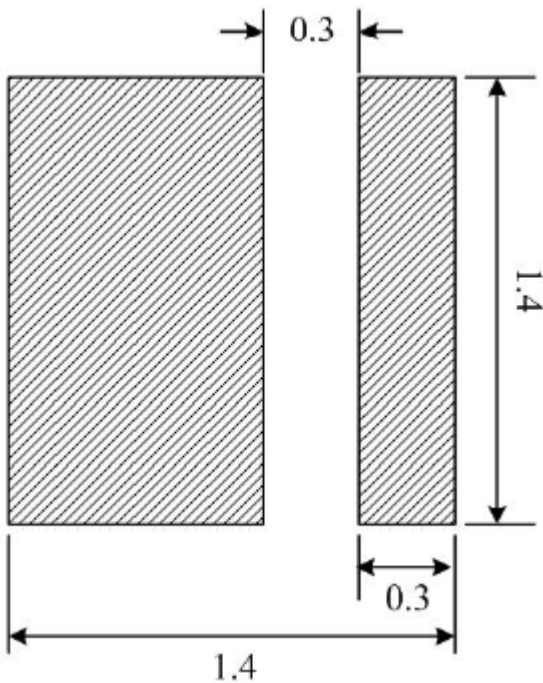


Top View

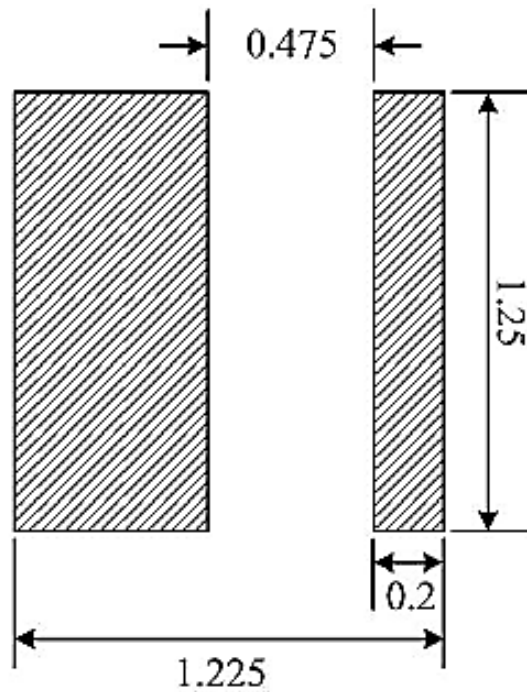


Bottom View

RECOMMENDED PCB SOLDER PAD



RECOMMENDED STENCIL PATTERN



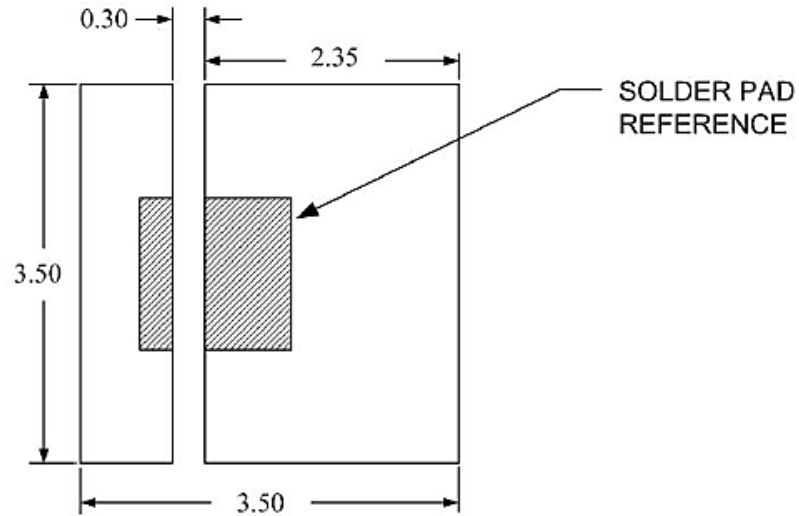


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RECOMMENDED TRACE LAYOUT



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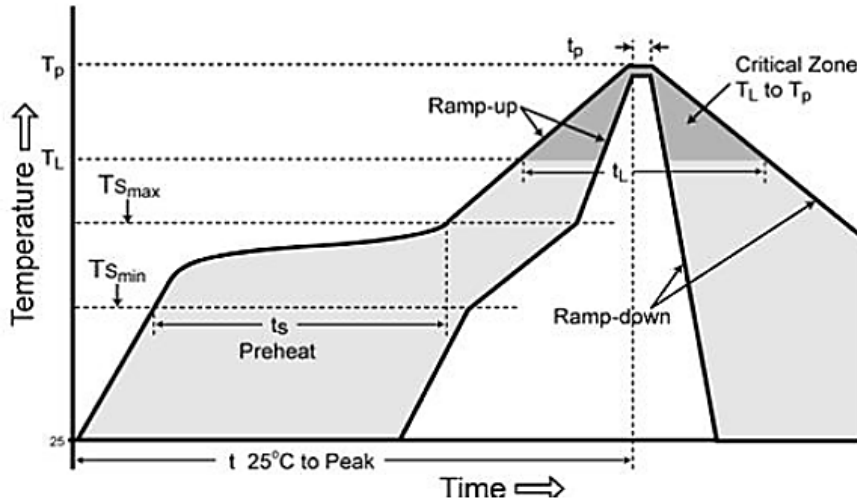


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REFLOW SOLDERING CHARACTERISTICS



Profile Feature	Pb-Free Assembly
Average ramp-up rate (TL to TP)	3°C/second max
Preheat	
Temperature Min (T _{SMIN})	150°C
Temperature Max (T _{SMAX})	200°C
Time (min to max) (ts)	60-180 seconds
Time maintained above:	
Temperature (TL)	217°C
Time (tL)	60-150 seconds
Peak/Classification Temperature (Tp)	240°C
Time within 5°C of actual Peak Temperature (tp)	20-40 seconds
Ramp-down rate	6°C/second max
Time 25°C to Peak Temperature	8 minutes max