

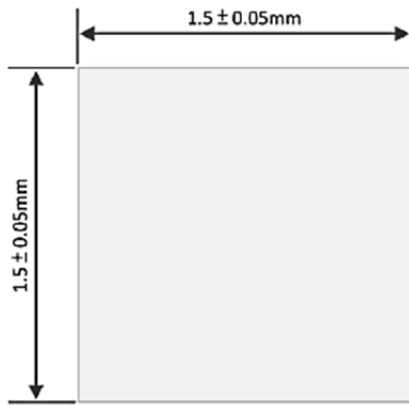


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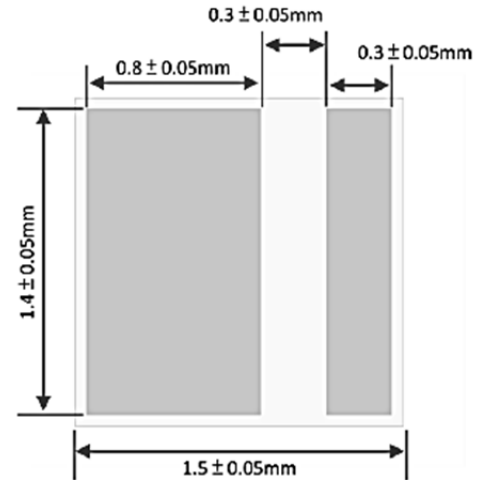
L515MBC

1.5 X 1.5 X 1.4mm BLUE Water Clear Power CSP LED

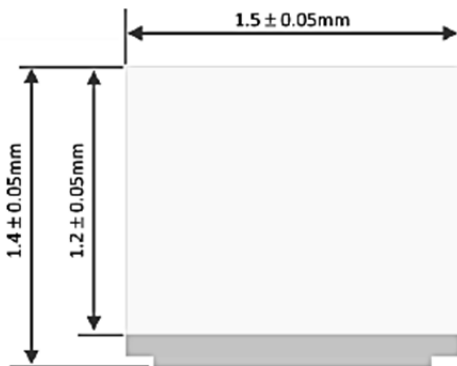
PACKAGE OUTLINES



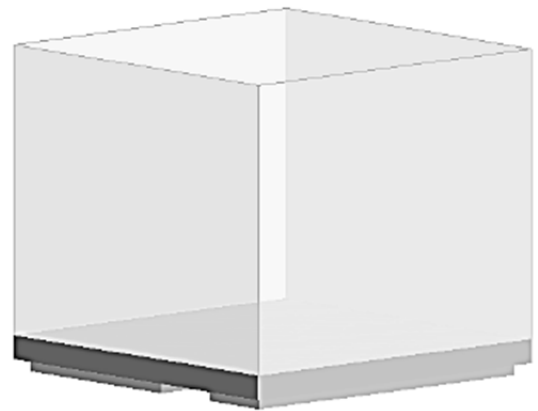
Top View



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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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	--	15	--	Lm
Wavelength	λ	350mA	450	--	475	nm
Forward Voltage	V _F	350mA	3.0	3.3	--	V
Thermal Resistance	Rθ _{J-C}	350mA	--	4	--	°C/W

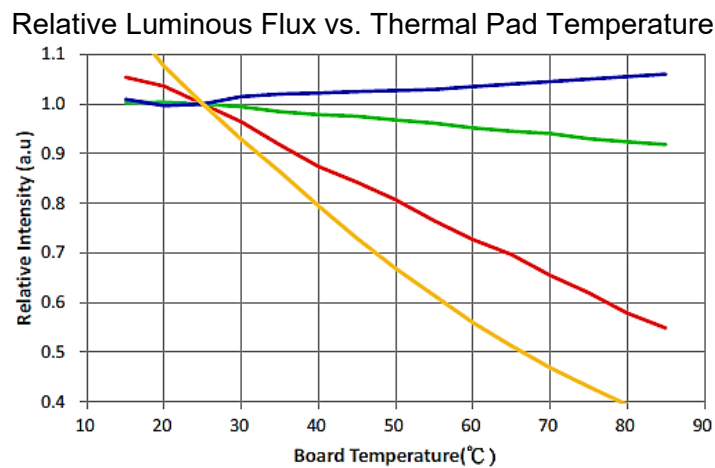
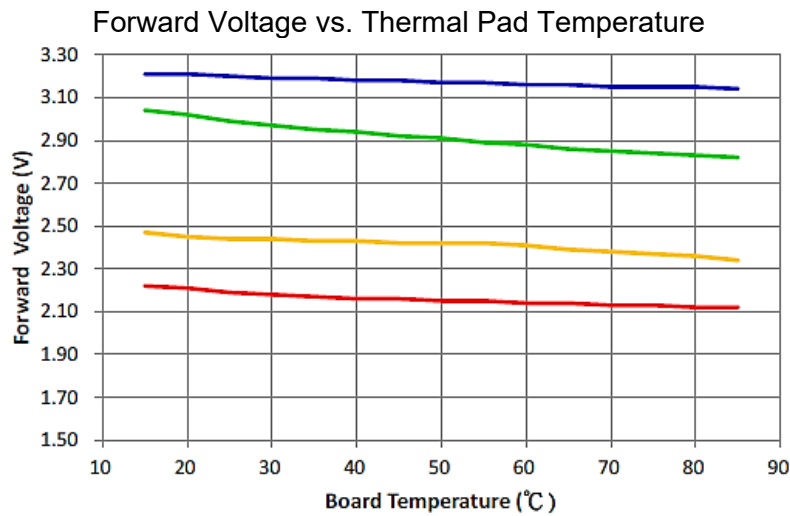
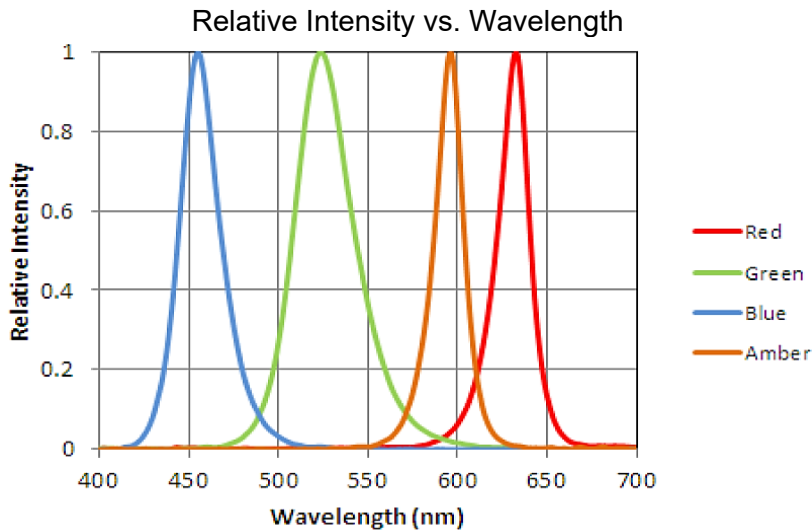


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L515MBC

1.5 X 1.5 X 1.4mm BLUE Water Clear Power CSP LED

OPTICAL-ELECTRICAL CHARACTERISTICS

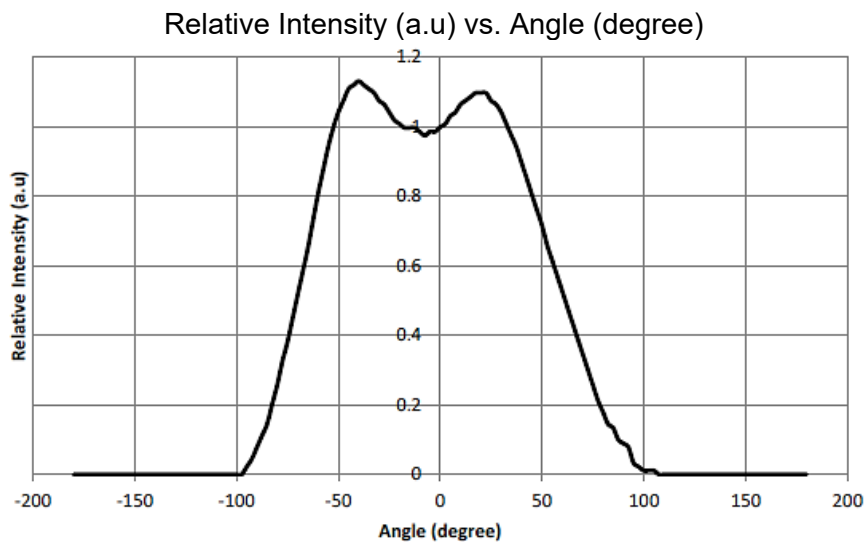
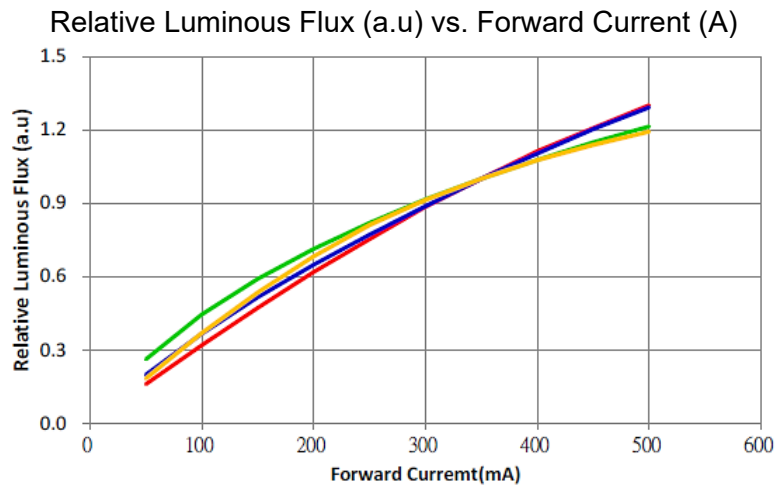
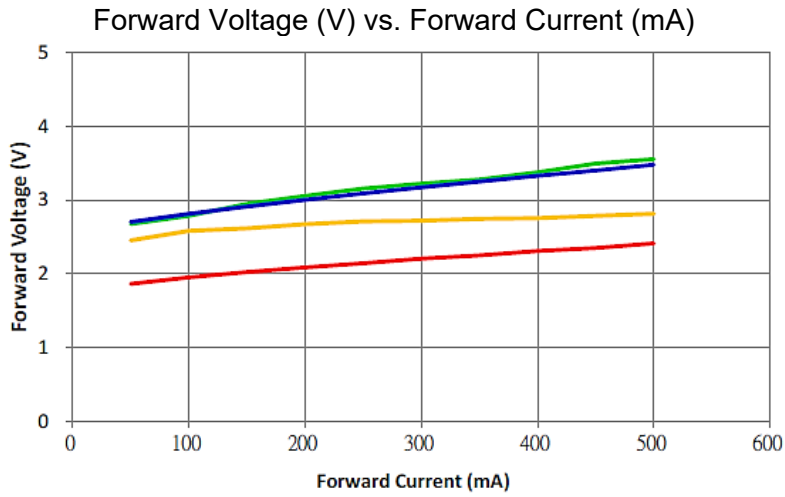




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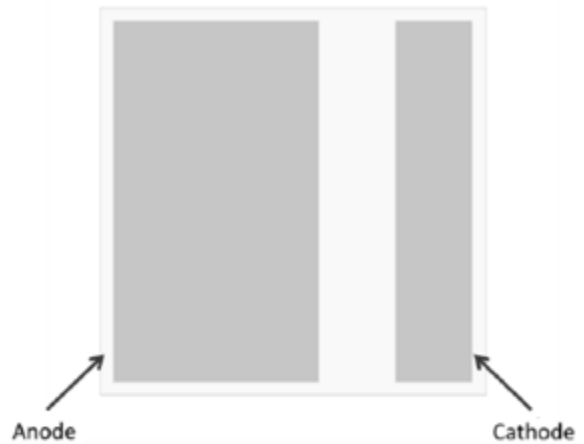


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RECOMMENDED SOLDERING PAD PATTERN

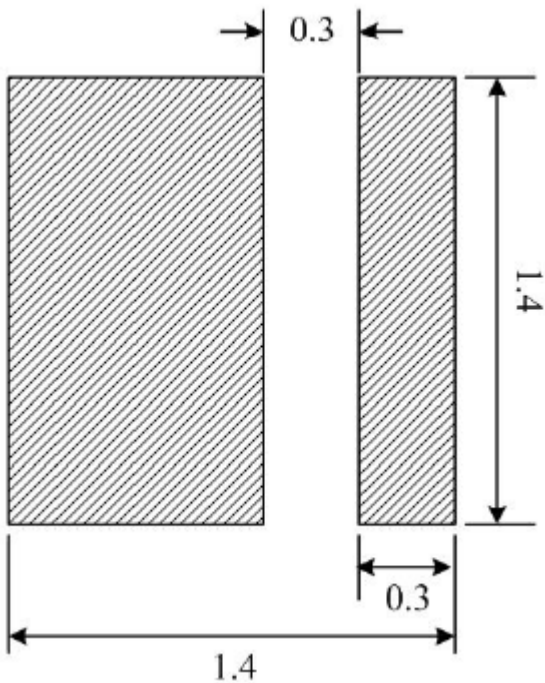


Top View

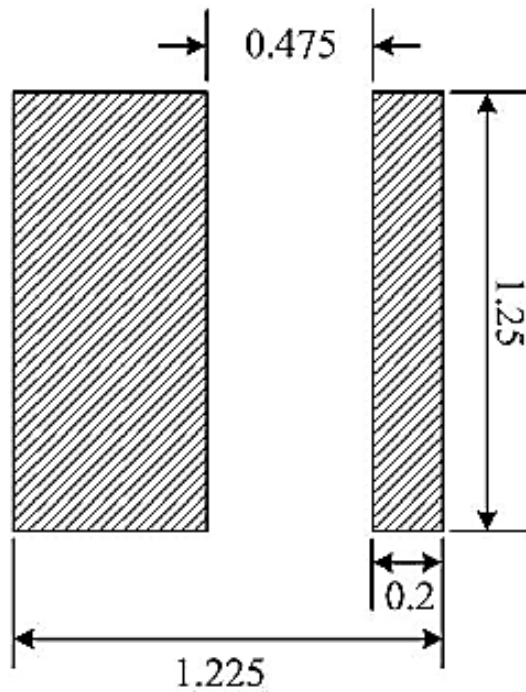


Bottom View

RECOMMENDED PCB SOLDER PAD



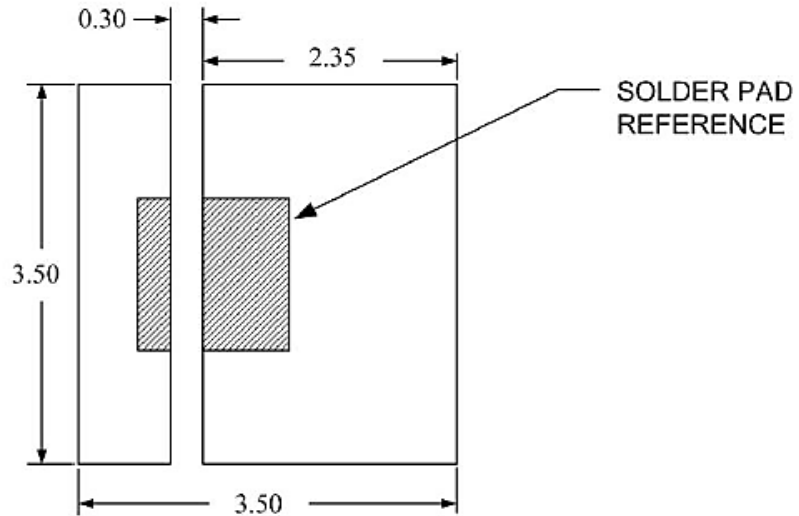
RECOMMENDED STENCIL PATTERN





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RECOMMENDED TRACE LAYOUT



Notes:

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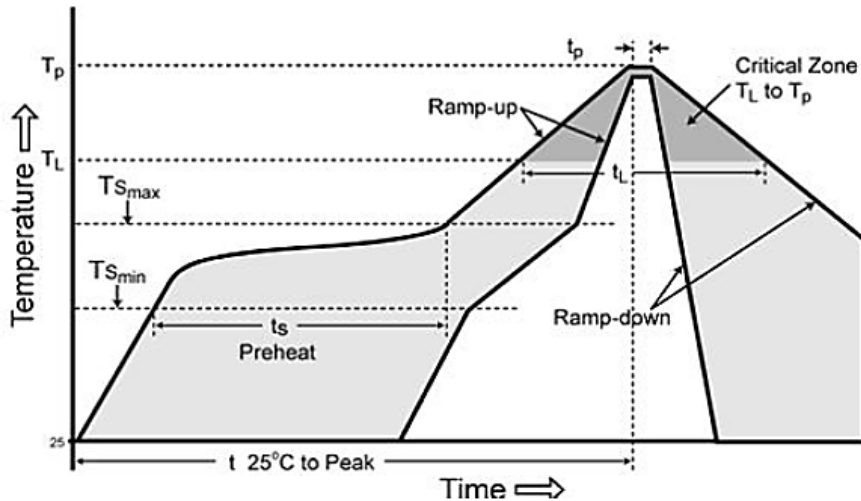


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REFLOW SOLDERING CHARACTERISTICS



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) (t_s)	60-180 seconds
Time maintained above:	
Temperature (TL)	217°C
Time (t_L)	60-150 seconds
Peak/Classification Temperature (T_p)	240°C
Time within 5°C of actual Peak Temperature (t_p)	20-40 seconds
Ramp-down rate	6°C/second max
Time 25°C to Peak Temperature	8 minutes max