



# LUXEON FlipChip Royal Blue

High current density Chip Scale Package (CSP) LED



Customers now have complete design flexibility to access Lumileds industry leading performance at the die level and customize the phosphor and packaging to best suit their lighting applications with package size of 0.5mm<sup>2</sup> LUXEON FlipChip Royal Blue. LUXEON FlipChip Royal Blue is a real Chip Scale Package (CSP) LED that can be attached by reflow without additional packaging. Traditional wire bonding limits the packing and power density of LEDs. LUXEON FlipChip Royal Blue LEDs can be packaged closer and can be driven at a higher current density, therefore requiring fewer emitters to achieve a higher lumen output at higher lumen densities.

## FEATURES AND BENEFITS

- Micro sized CSP: 0.5mm<sup>2</sup> package for design flexibility and packing density
- No wire bonds allows for SMT direct attach and reflow
- 5-sided emitter enables wide viewing angle
- 445–460nm wavelength range for dispense and remote phosphor applications
- Low thermal resistance of 2.5°K/W (0.5mm<sup>2</sup>) for leading system level lm/\$

## PRIMARY APPLICATIONS

- Display
- Flash
- Illumination

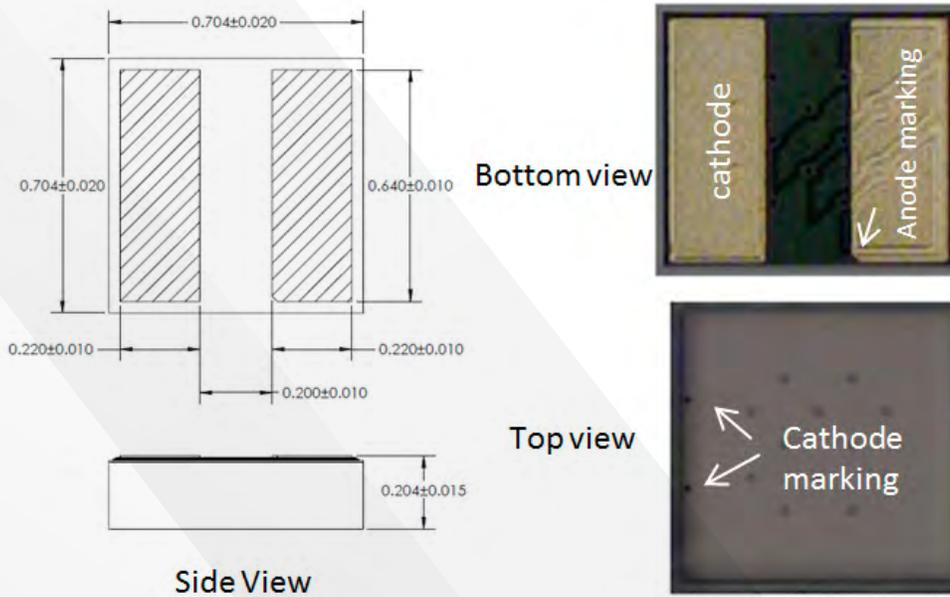
LUXEON FlipChip Royal Blue product performance at test current,  $T_j=25^\circ\text{C}$ .

SIZE (mm <sup>2</sup> )	DOMINANT WAVELENGTH [1] (nm)		RADIOMETRIC POWER [2, 3] (mW)		TEST CURRENT (mA)	PART NUMBER
	MINIMUM	MAXIMUM	MINIMUM	TYPICAL		
0.5	445	450	275	287	175	L0F2-B445050002751
	450	455	275	287	175	L0F2-B450050002751
	455	460	275	287	175	L0F2-B455050002751
	455	460	275	287	175	L0F2-B000050000001

Notes:

1. Lumileds maintains a tolerance of  $\pm 2\text{nm}$  on dominant wavelength measurements.
2. Lumileds maintains a tolerance of  $\pm 6.5\%$  on radiometric power measurements.
3. Radiometric power values are based on a die packaged on ceramic tile with high reflective surface and dome encapsulation.

Mechanical Dimensions for LUXEON FlipChip Royal Blue L0F2-Bxxx0500xxxx1.



Notes for Mechanical Dimensions:

1. Drawings are not scale.
2. All dimensions are in millimeters.