

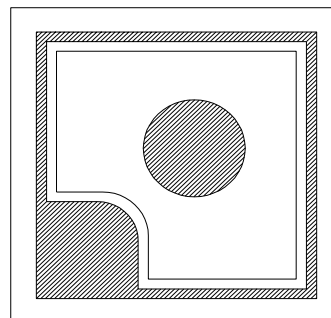
# POWERGa(i)N™ Technology

## UNPRX525-X0X

### HIGH PERFORMANCE GREEN LED DIE

#### Maximum Ratings @ T<sub>A</sub> = 25° C

DC Forward Current	30mA
Peak Forward Current (<10ms, 1/10 Duty cycle)	100Ma
Led Junction Temp	100° C
Forward Voltage	4.0 V DC
Reverse Voltage	-5.0 V DC
Operating Temperature Range	-40° C+ 85° C
Storage Temperature Range	-40° C+100° C
ESD Class (Mil Std 883)	I



#### Typical Electrical Characteristics @ 25 C, 20 mA DC

Part Code	Optical Power mW		Forward Voltage V <sub>f</sub> , V		Reverse Current I <sub>r</sub> @ 5V, uA		Peak Wavelength λ <sub>p</sub> nm	Dominant Wavelength λ <sub>d</sub> nm			Spectral Width Δλ nm	Series Resistance R <sub>s</sub>
	Min	Typ	Typ	Max	Typ	Max	Typ	Min	Typ	Max	Typ	Typ
UNPRC525B01	0.6	0.8	3.5	4.0	4.0	10.0	524	520	525	530	30	30
UNPRB525A02	0.5	0.7	3.5	4.0	4.0	10.0	524	515	525	535	30	30
UNPRA525A00	0.5	0.7	3.5	4.0	4.0	10.0	524	515	525	535	30	30

#### Mechanical Specifications

Die Size	325um x 325um ± 15um. (0.013” X 0.013” ±0.0015”)		
Die Thickness	125um ±20um (0.005±0.0005)	Bond Pad	100um diameter
Contact Metal	(Both P and N contact are Au for consistent and reliable bonds.)		Au
Backside Metal	N/A		

#### Options

- High Performance die with 100% Test or Sample Test and 100% Sort or Unsorted versions available.
- Contact Factory for details on our advanced die testing and sorting capability.
- Die mounted on 200 mm Plastic Tape Or Grip Ring, Contact Factory for other available options.

#### Notes:

1. The optical power is determined by measuring bare die mounted on TO-46 headers using an integrating sphere. An Index matching encapsulant is not used to enhance this measurement.
2. A tolerance of ± 15% on brightness level, and ± 2 nm on chromaticity, due to measuring variations applies.
3. Maximum ratings are package dependent. The above ratings were determined using a T-1 ¾ Pkg for characterization. Ratings for other packages may differ. The forward currents are not limited by the die but by the effect of the package on the junction temperature of the LED.
4. All die products conform to the listed specifications when packaged and operated within the maximum limits shown above. Typical values are provided for information only but are within the range of average values of acceptable sample sizes.