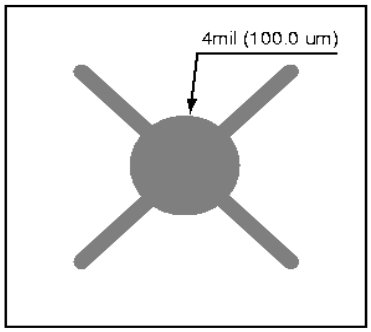
POWERBR(ite)™ Technology

UNPRX618-X0X

HIGH PERFORMANCE **RED** LED DIE

Maximum Ratings @ T_A = 25° C

DC Forward Current	30mA
Peak Forward Current (<10ms,1/10 Duty cycle)	100mA
Led Junction Temp	100° C
Forward Voltage	2.5V 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 Electo-Optical Characteristics @ 25° C, 20 mA DC

Part Code	Luminous Intensity Iv, mcd		Forward Voltage V_f, V	Reverse Current I_r @ 5V, uA	Peak Wavelength λ_p nm	Dominant Wavelength λ_d nm			Spectral Width (FWHM) $\Delta\lambda$ nm	Series Resistance R_s
	Min	**Typ**	**Typ**	**Max**	**Typ**	**Min**	**Typ**	**Max**	**Typ**	**Typ**
UNPRC618F02	130	150	1.9	10.0	625	608	6 18	628	18	7
UNPRB618C02	100	110	1.9	10.0	625	608	6 18	628	18	7
UNPRA618A02	70	90	1.9	10.0	625	608	6 18	628	18	7

Mechanical Specifications

Die Size	300um x 300um +/- 15um. (0.012" X 0.012" ±0.0015")	
Die Thickness	300um +/-25um (0.012 ±0.001)	Bond Pad 100um diameter
Contact Metal (P)		Au
Backside Metal (N)		Au

Options

- 100% Tested or Sample Tested, Sorted or Unsorted, Contact Factory for details on our test/sort 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 die mounted on TO-46 headers inside an integrating sphere. An index matching encapsulent is not used to enhance this measurement.

2. The dominate wavelength is calculated from the 1931 2^0 CIE Chromaticity Diagram.

3. A tolerance of ± 15% on brightness level, and ± 2 nm on chromaticity, due to measuring variations applies.

4. 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.

5. 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.

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