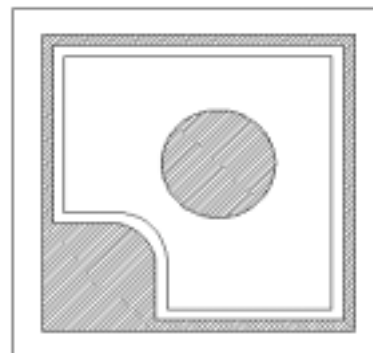


Maximum Ratings @ T_A = 25° C

DC Forward Current	30mA
Peak Forward Current (<10ms, 1/10 Duty cycle)	100mA
Led Junction Temp	100° C
Forward Voltage	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 _f , V		Reverse Current I _r @ 5V, uA		Peak Wavelength λ _p nm	Dominant Wavelength λ _d nm			Spectral Width (FWHM) Δλ nm	Series Resistance R _s
	Min	Typ	Typ	Max	Typ	Max	Typ	Min	Typ	Max	Typ	Typ
UNPRC470E01	1.2	1.5	3.6	4.0	4.0	10.0	465	465	470	475	30	30
UNPRB470D02	1.0	1.2	3.6	4.0	4.0	10.0	465	460	470	480	30	30
UNPRA470C02	0.7	1.0	3.6	4.0	4.0	10.0	465	460	470	480	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	100 um diameter
Contact Metal	(Both P and N contact are Au for consistent, reliable bonds.)		Au	
Backside Metal	N/A			

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 bare die mounted on TO-46 headers using an integrating sphere. An Index matching encapsulant is not used to enhance this measurement.
2. The dominate wavelength is calculated from the 1931 2° 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.