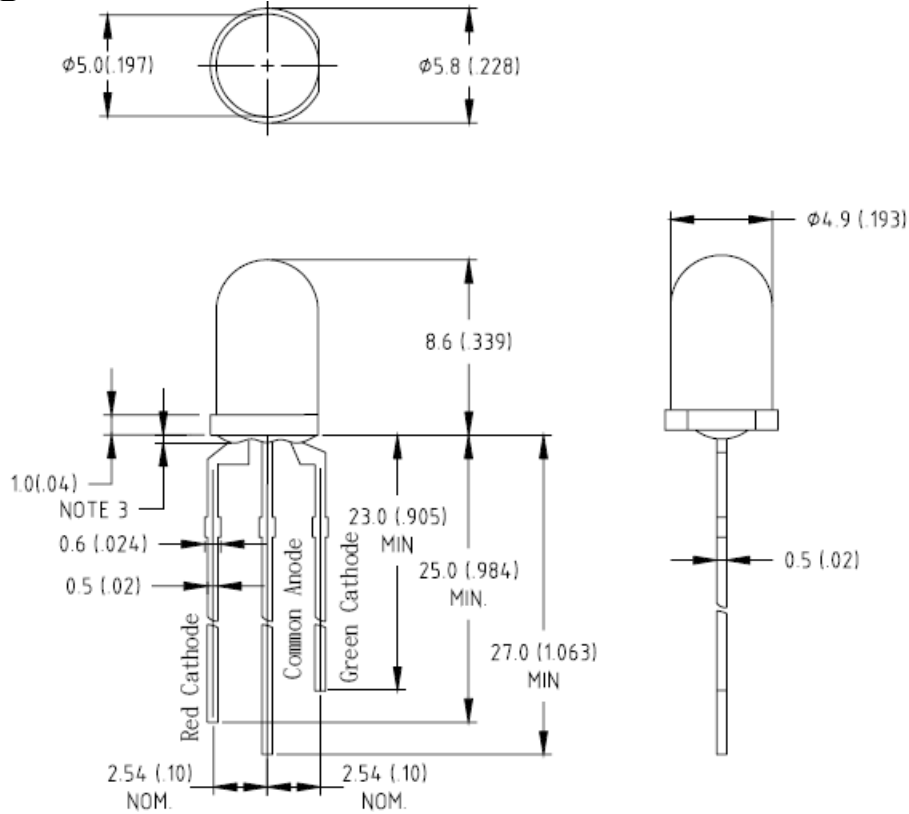


Features:

- ◆ Standard T-1 diameter package
- ◆ General purpose leads
- ◆ Reliable and rugged

Package Dimensions:



Part NO.	Chip Material		Lens Color	Source Color
5RG9HT-B	Red	Green	Water clear	Red & Green

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 mm (.010") unless otherwise noted.
3. Protruded resin under flange is 1.0mm (.04") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.
6. This data-sheet only valid for six months.

Absolute Maximum Ratings at Ta=25°C

Parameter	MAX.		Unit
Power Dissipation	Red	50	mW
	Green	130	
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100		mA
Continuous Forward Current	Red	35	mA
	Green	50	
Derating Linear From 50°C	0.4		mA/°C
Reverse Voltage	5		V
Operating Temperature Range	-40°C to +80°C		
Storage Temperature Range	-40°C to +80°C		
Lead Soldering Temperature [4mm(.157") From Body]	260°C for 5 Seconds		

Electrical Optical Characteristics at Ta=25°C

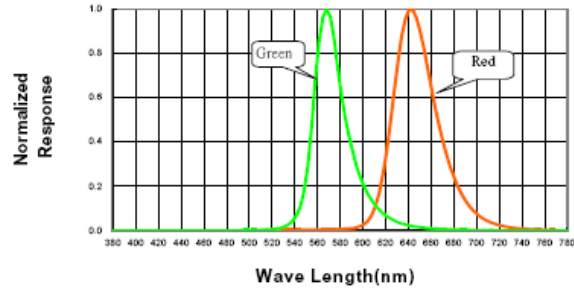
Parameter	Symbol	Emitting Color	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _v	Green	---	110	---	mcd	I _f =20mA Note 1
		Red	---	130			
Viewing Angle	2 θ _{1/2}	Green	20	25	30	Deg	Note 2
		Red	23	25			
Peak Emission Wavelength	λ _p	Green	520	522	523	nm	Measurement @Peak
		Red	623	624			
Dominant Wavelength	λ _d	Green	520	522	523	nm	Note 3
		Red	623	624			
Spectral Line Half-Width	Δλ	Green	6500	7000	8000	nm	
		Red	5500	6000			
Forward Voltage	V _f	Green	3.0	3.2	3.4	V	I _f =20mA
		Red	1.8	2.0			
Reverse Current	I _R	Green	---	---	5	μA	V _R =5V
		Red	---	---	5		

Notes:

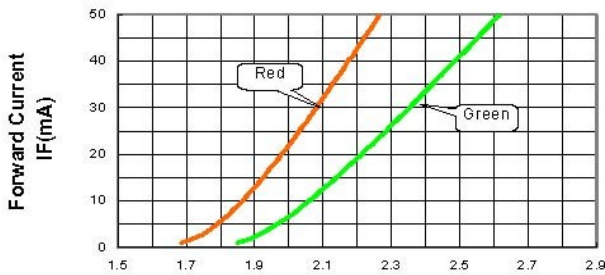
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- 2.θ_{1/2} is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.The dominant wavelength (λ_d) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

Typical Electrical / Optical Characteristics Curves
(25°C Ambient Temperature Unless Otherwise Noted)

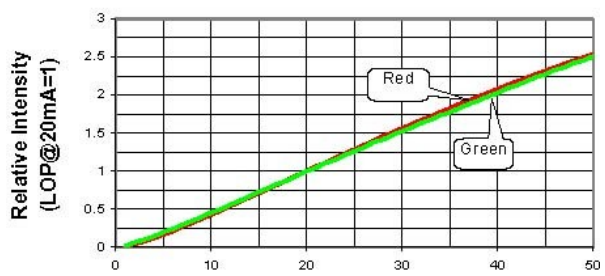
Spectral Radiance Green Peak @ 568nm
Red Peak @ 640nm



Forward Current vs Forward Voltage



Relative Luminous Intensity vs Forward Current



Beam Pattern

