

L-813YD YELLOW

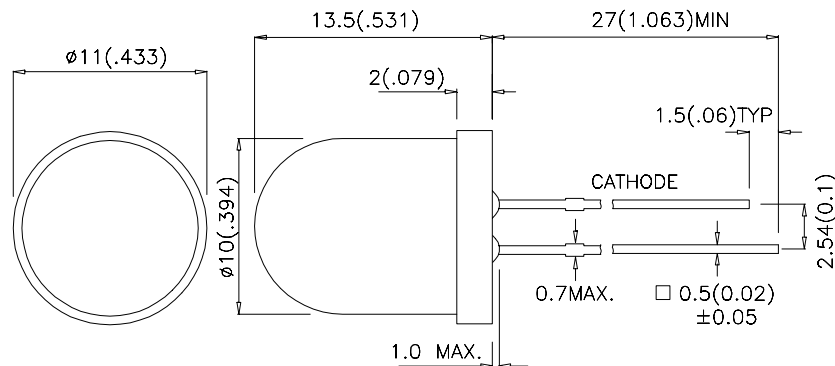
Features

- 10mm DIAMETER BIG LAMP.
- WIDE VIEWING ANGLE.
- I.C. COMPATIBLE.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.

Description

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
L-813YD	YELLOW(GaAsP/GaP)	YELLOW DIFFUSED	18	50	60°

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

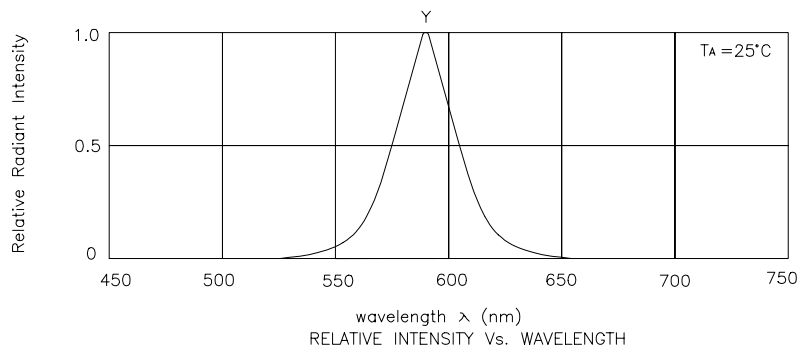
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Yellow	590		nm	I _F =20mA
λ _D	Dominate Wavelength	Yellow	588		nm	I _F =20mA
Δλ _{1/2}	Spectral Line Half-width	Yellow	35		nm	I _F =20mA
C	Capacitance	Yellow	20		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	Yellow	2.1	2.5	V	I _F =20mA
I _R	Reverse Current	Yellow		10	uA	V _R = 5V

Absolute Maximum Ratings at T_A=25°C

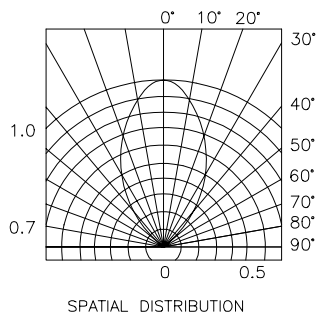
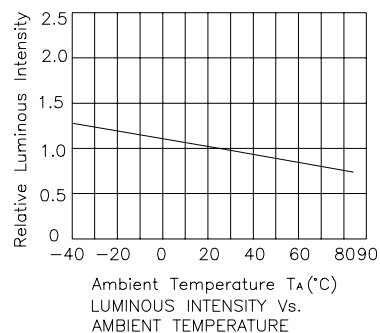
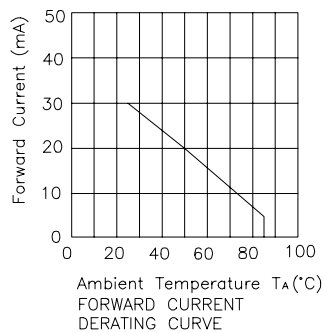
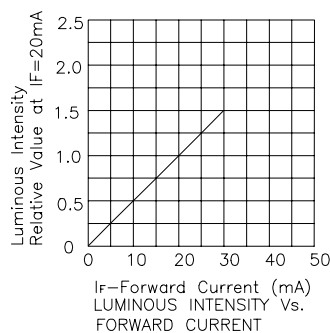
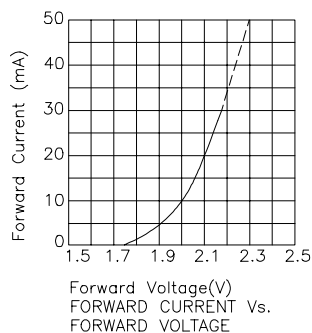
Parameter	Yellow	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	140	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds	

Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.



Yellow L-813YD



L-813ED ORANGE

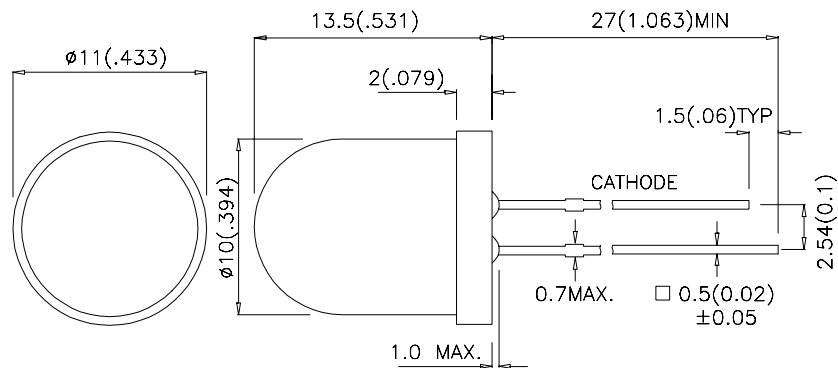
Features

- 10mm DIAMETER BIG LAMP.
- WIDE VIEWING ANGLE.
- I.C. COMPATIBLE.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.

Description

The Orange source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
L-813ED	ORANGE(GaAsP/GaP)	ORANGE DIFFUSED	36	100	60°

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

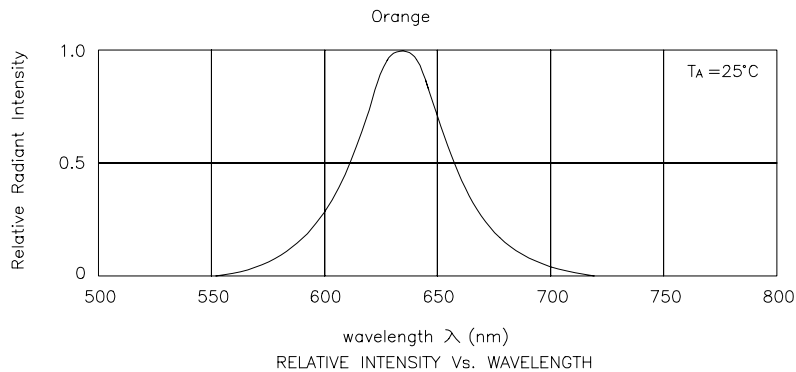
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Orange	627		nm	I _F =20mA
λ _D	Dominate Wavelength	Orange	625		nm	I _F =20mA
Δλ _{1/2}	Spectral Line Half-width	Orange	45		nm	I _F =20mA
C	Capacitance	Orange	15		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	Orange	2.0	2.5	V	I _F =20mA
I _R	Reverse Current	Orange		10	uA	V _R = 5V

Absolute Maximum Ratings at T_A=25°C

Parameter	Orange	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds	

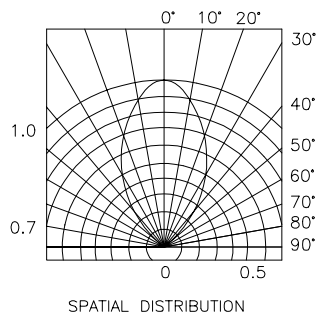
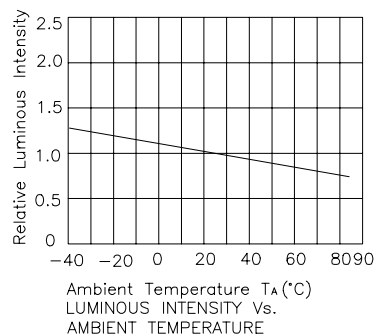
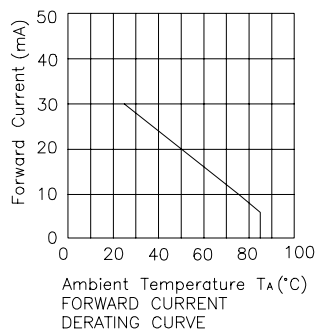
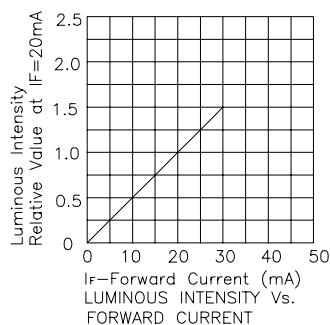
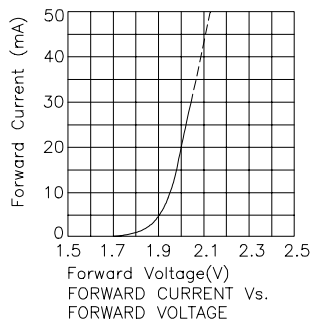
Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.



Orange

L-813ED



L-8131D HIGH EFFICIENCY RED

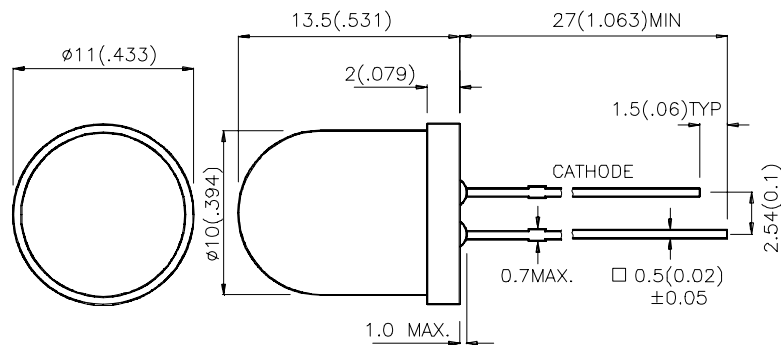
Features

- 10mm DIAMETER BIG LAMP.
- WIDE VIEWING ANGLE.
- I.C. COMPATIBLE.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.

Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @20 mA		Viewing Angle
			Min.	Typ.	θ1/2
L-813ID	HIGH EFFICIENCY RED(GaAsP/GaP)	RED DIFFUSED	36	100	60°

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

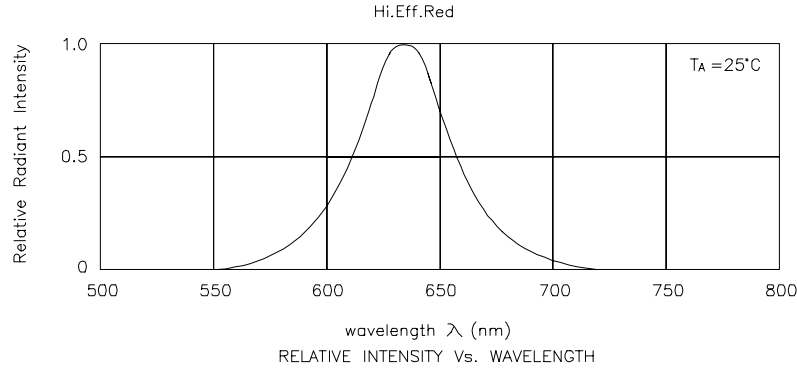
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	High Efficiency Red	627		nm	I _F =20mA
λ _D	Dominate Wavelength	High Efficiency Red	625		nm	I _F =20mA
Δλ _{1/2}	Spectral Line Half-width	High Efficiency Red	45		nm	I _F =20mA
C	Capacitance	High Efficiency Red	15		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	High Efficiency Red	2.0	2.5	V	I _F =20mA
I _R	Reverse Current	High Efficiency Red		10	uA	V _R = 5V

Absolute Maximum Ratings at T_A=25°C

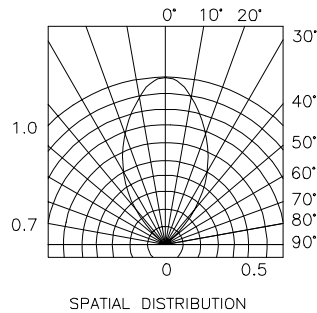
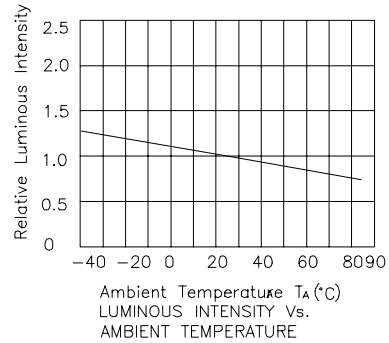
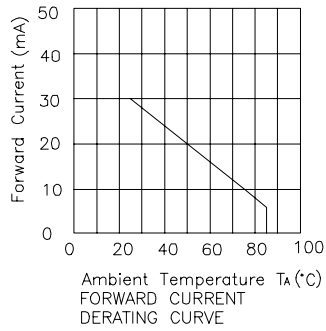
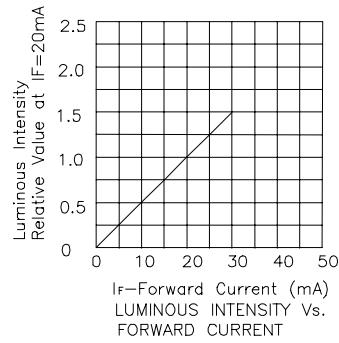
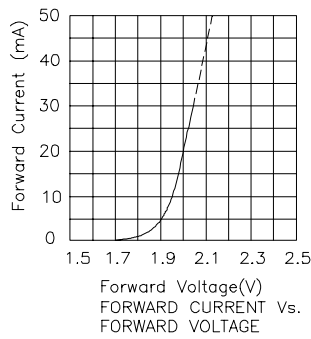
Parameter	High Efficiency Red	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds	

Notes:

- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2mm below package base.



High Efficiency Red L-813ID



L-813GD GREEN

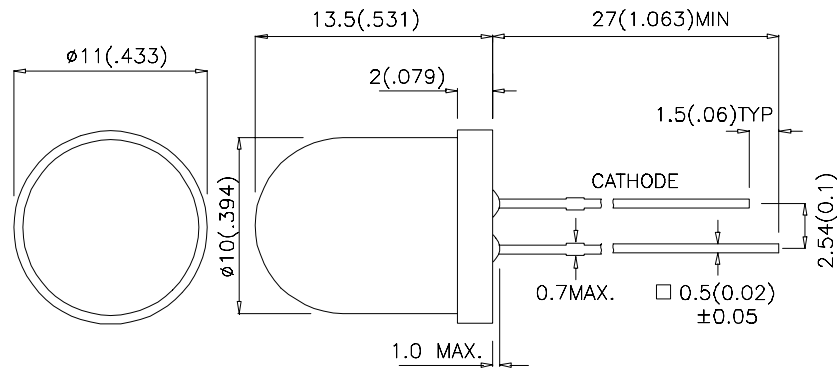
Features

- 10mm DIAMETER BIG LAMP.
- WIDE VIEWING ANGLE.
- I.C. COMPATIBLE.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.

Description

The Green source color devices are made with Gallium Phosphide Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
L-813GD	GREEN (GaP)	GREEN DIFFUSED	18	60	60°

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

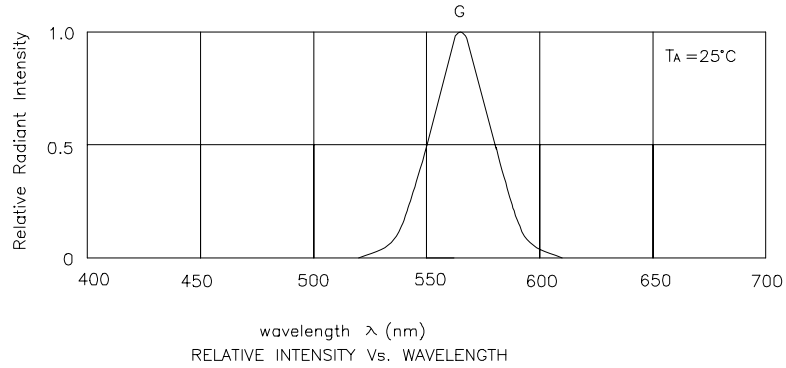
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Green	565		nm	I _F =20mA
λ _D	Dominate Wavelength	Green	568		nm	I _F =20mA
Δλ _{1/2}	Spectral Line Half-width	Green	30		nm	I _F =20mA
C	Capacitance	Green	15		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	Green	2.2	2.5	V	I _F =20mA
I _R	Reverse Current	Green		10	μA	V _R = 5V

Absolute Maximum Ratings at T_A=25°C

Parameter	Green	Units
Power dissipation	105	mW
DC Forward Current	25	mA
Peak Forward Current [1]	140	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds	

Notes:

- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2mm below package base.



Green L-813GD

