Red GaAsP T-1 LED Lamps

Optoelectronic Products

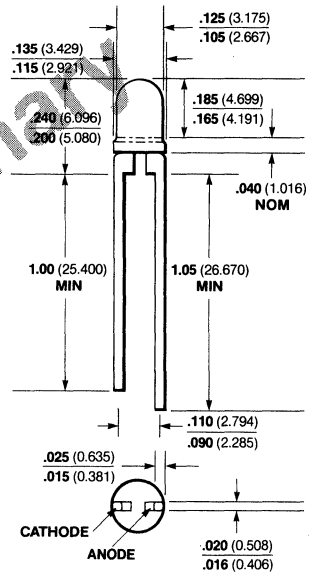
5082-4480
5082-4483
5082-4486

General Description

The 5082-4480, 5082-4483 and 5082-4486 are red light-emitting diodes encapsulated in plastic. The 5082-4480 has a red diffused lens, the 5082-4483 has a clear diffused lens, and the 5082-4486 has a clear non-diffused lens. These LED devices are designed for applications where space is at a premium. Visual light emission is in the 600 nm to 700 nm range.

High Intensity—0.8 mcd Typical
Wide Viewing Angle
Small Size T-1 Diameter 0.125 inches (3.18 mm)
IC Compatible
Reliable and Rugged
5082-4480—Red Diffused Lens
Excellent On/Off Contrast Ratio
High Axial Luminous Intensity
Wide Viewing Angle
5082-4483—Clear Diffused
Masks Red in Off Condition
5082-4486—Clear Non-diffused
For Illuminating External Lens, Annunciators or Photodetectors

Package Outline



Notes
All dimensions in inches **bold** and millimeters (parentheses).
Silver plated pins.
An epoxy meniscus may extend about **.040** inches (1 mm) down the leads.

Absolute Maximum Ratings

Maximum Temperature

Storage Temperature	−55°C to +100°C
Operating Temperature	−55°C to +100°C
Pin Temperature (Soldering, 7 s)	230°C

Maximum Power Dissipation

Total Dissipation at T_A = 25°C	100 mW
Derate Linearly from 50°C	

Maximum Voltage and Currents

I_F	Forward dc Current at T_A = 25°C	50 mA
I_{pk}	Peak Forward Current at 1.0 μs pulse width, 300 pps	1.0 A

Electrical and Radiant Characteristics T_A = 25°C

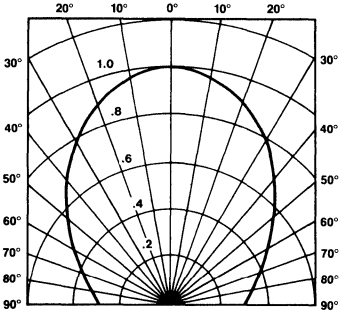
Symbol	Characteristic	Min	Typ	Max	Units	Test Conditions
I_V	Luminous Intensity	0.3	0.8		mcd	I_F = 20 mA
λ_{pk}	Wavelength		655		nm	Measurement at Peak
V_F	Forward Voltage		1.6	2.0	V	I_F = 20 mA
BV_R	Reverse Beakdown Voltage	3.0	10		V	I_R = 10 μA

Typical Electrical Characteristic Curves

5082-4480
5082-4483
5082-4486

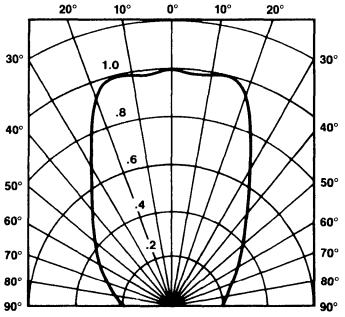
Relative Luminous Intensity vs Angular Displacement

5082-4480 • 5082-4483

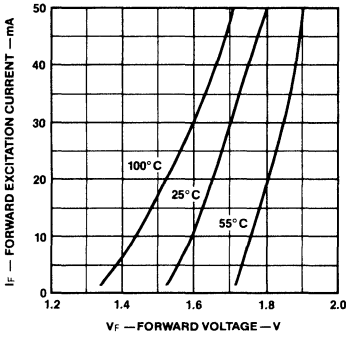


Relative Luminous Intensity vs Angular Displacement

5082-4486



Forward Current vs Forward Voltage



Intensity vs Forward Current