Emitter Assembly ELM-4000 Series

Dual Drive

Lead Frame Construction

Pulse Oximetry Component

Clear Epoxy

The ELM-4000 Series Emitter Assemblies are specially designed for medical applications where selection of peak wavelength is a key requirement. Emission source material is GaAlAs in conjunction with GaAlP complete with clear epoxy lens.

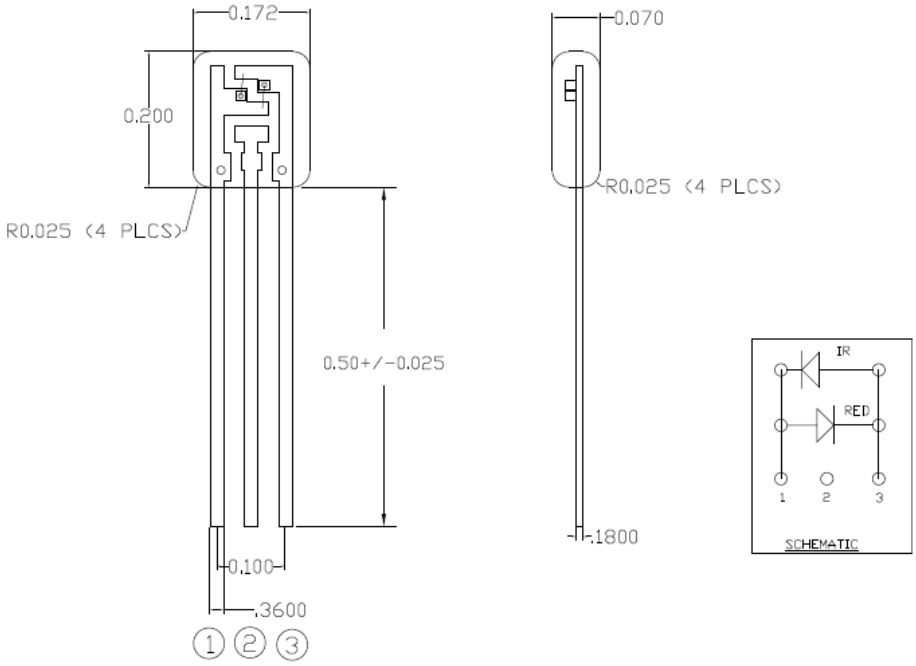
FEATURES

- Low Cost
- 660 nm ±3 nm Peak Wavelength Red LED
- Three IR Wavelength Choices
- Dual Drive

APPLICATIONS

- Pulse Oximetry
- Finger/Ear Probes
- Disposable Strip or Butterfly

Dimensions (ELM-4001)



Emitter Assembly ELM-4000 Series

RED 660nm

Parameter @ 25ºC	Symbol	Conditions	Min.	Typ.	Max.	Absolute	Unit
Forward Voltage	V_f	If=20mA		1.85	2.30		V
Reverse Voltage	VB_r	Ibr=10µA	3.0				V
Reverse Current	I_r	Vr=3V			100		µA
Radiated Power	P_o	If=20mA		1			mW
Peak Wavelength	λ_p	If=20mA	657	660	663		nm
Spectral Bandwidth	λΔ	If=20mA		20			nm

INFRARED 880nm (ELM-4001)

Forward Voltage	V_f	If=20mA			1.50		V
Reverse Voltage	VB_r	Ibr=10µA	3.0				V
Peak Wavelength	λ_p	If=20mA	870	880	890		nm
Spectral Bandwidth	λΔ	If=20mA		60	80		nm
Radiated Power	P_o	If=20mA	>=0.6	1			mW

INFRARED 940nm (ELM-4002)

Forward Voltage	V_f	If=20mA		1.20	1.40		V
Reverse Voltage	VB_r	Ibr=10µA	5.0				V
Peak Wavelength	λ_p	If=20mA	930	940	950		nm
Spectral Bandwidth	λΔ	If=20mA		45			nm
Radiated Power	P_o	If=20mA	>=0.6	1			mW

INFRARED 905nm (ELM-4003)

Forward Voltage	V_f	If=20mA		1.20	1.40		V
Reverse Voltage	VB_r	Ibr=10µA	5.0				V
Peak Wavelength	λ_p	If=20mA	900	905	910		nm
Spectral Bandwidth	λΔ	If=20mA		70			nm
Radiated Power	P_o	If=20mA	>=0.6	1			mW

Emitter Assembly ELM-4000 Series

Ordering Information

Description	Part Number
Emitter Assembly; Lead Frame; 660nm/880nm	ELM-4001
Emitter Assembly; Lead Frame; 660nm/940nm	ELM-4002
Emitter Assembly; Lead Frame; 660nm/905nm	ELM-4003

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