

Light Emitting Diodes

Thru-Hole LEDs

ADP Series



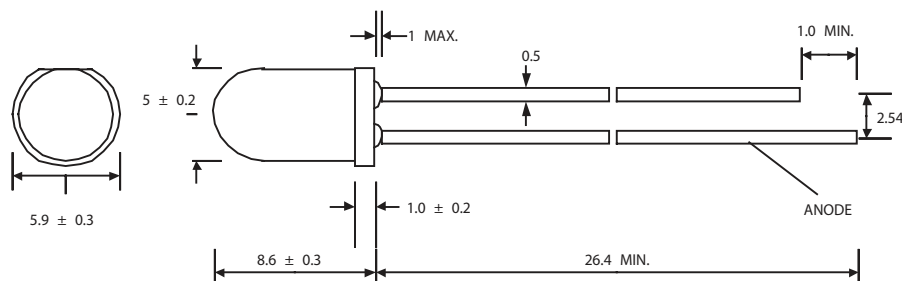
ADP1-51500-S1 & S2

RED



INTRODUCTION

The Adiva Thru-Hole LED has a wide range of applications and is encapsulated in water clear epoxy resin with an 5mm diameter.



FEATURES

- High Luminous intensity, with a longer operation life.
- Excellent consistency on color, intensity and Forward Current.
- Rugged and reliable design gives high shock/vibration resistance.
- Excellent Solderability and resistance to soldering heat.
- High Reliability, 100% Probing Test.
- Low thermal resistance

ABSOLUTE MAXIMUM RATINGS

Items	Symbols	Ratings	Unit
Operation Forward Current	I_f	30	mA
Reverse Current	I_r	100	uA
Operating Temperature Range	T_{op}	-25 ~ 80	C
Power Dissipation	P_D	100	mW
Peak Pulse Forward Current	P_{If}	100	mA
Storage Temp. Range	T_s	-30 ~ 100	C
Soldering Temperature	T_{sol}	* 260	C

ELECTRICAL-OPTICAL CHARACTERISTICS

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	V_f	IF=20mA	1.9	--	2.5	V
Dominant Wavelength	λ_D	IF=20mA	620		635	nm
Luminous Intensity	I_v	IF=20mA	500	--	4500	mcd

SERIES STANDARD SPECIFICATIONS

Shape	Emitting Color	Part Number	Wavelength nm	Diffusion	IR(μ A) IF RV=5V MAX Min	Reverse Voltage RV	Emitting Material	Viewing Angle Q (deg.)
5 ϕ	Red	ADP1-51500-S1 & S2	620 - 635	W.C.	100 2	5 V	GaAsP/GaP	15 - 30

Bin Ranking	S1	S2			Unit
Luminous Intensity	500 - 2500	2500 - 4500			mcd

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Typical Electrical/Optical Characteristics Curve:
(25 °C Ambient Temperature Unless Otherwise noted)

Fig1. Relative Intensity vs. Wavelength

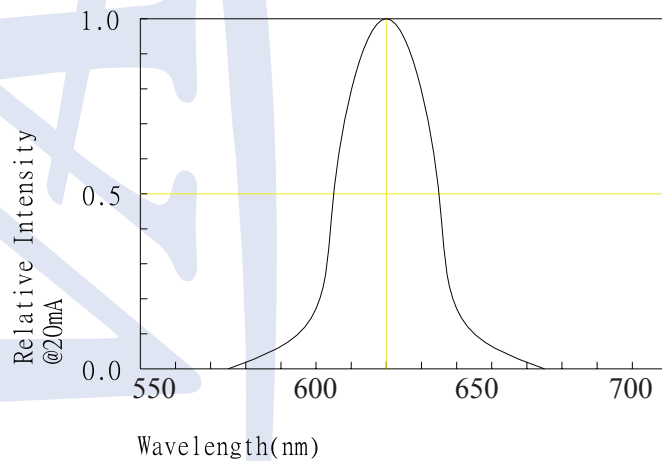


Fig2. Forward Current vs. Forward Voltage

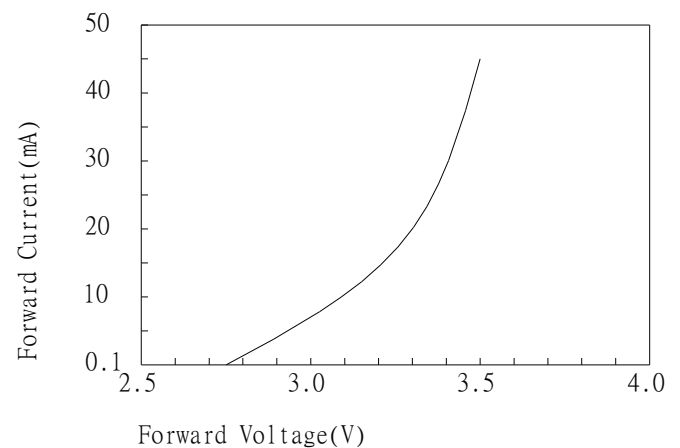


Fig3. Relative Intensity vs. Forward Current

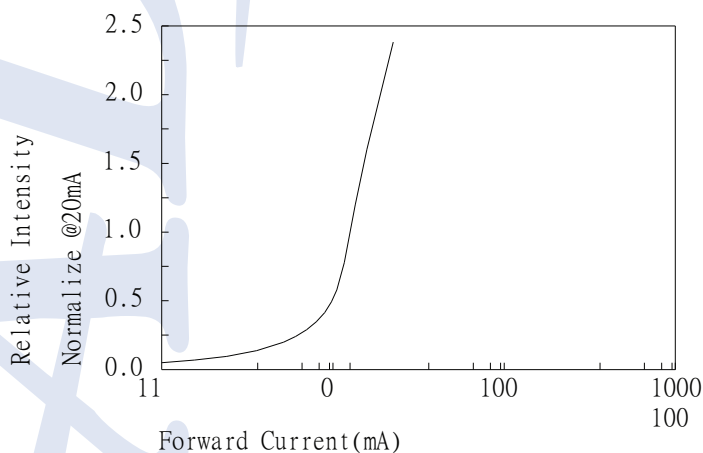


Fig4. Forward Voltage vs. Temperature

