

Light Emitting Diodes

Thru-Hole LEDs

ADP Series



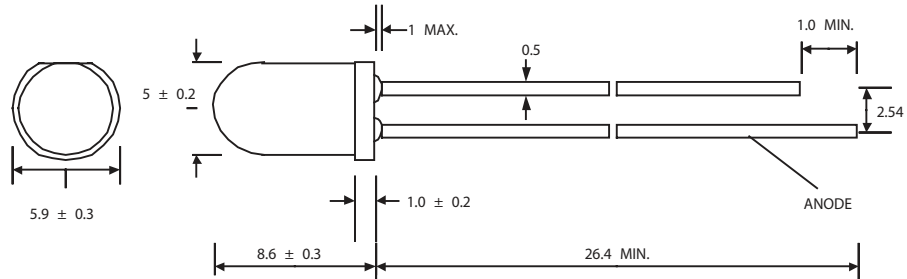
ADP7-51500-Sx

BLUE



INTRODUCTION

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



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

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

ELECTRICAL-OPTICAL CHARACTERISTICS

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	V_f	IF=20mA	2.9	--	3.5	V
Dominant Wavelength	λ_D	IF=20mA	460	465	470	nm
Luminous Intensity	I_v	IF=20mA	2000	--	12000	mcd

SERIES STANDARD SPECIFICATIONS

Shape	Emitting Color	Part Number	Wavelength nm	Diffusion	IR(μ A)		Reverse Voltage RV	Emitting Material	Viewing Angle Q (deg.)
					IF RV=5V MAX	Min			
5 ϕ	Blue	ADP7-51500-Sx	460 - 470	W.C.	100	20	5V	InGaN	15 - 30

Bin Ranking	S1	S2	S3	S4	Unit
Luminous Intensity	2000 - 4500	4000 - 7000	6000 - 9000	10000 - 12000	mcd

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

Fig1. Relative Intensity vs. Wavelength

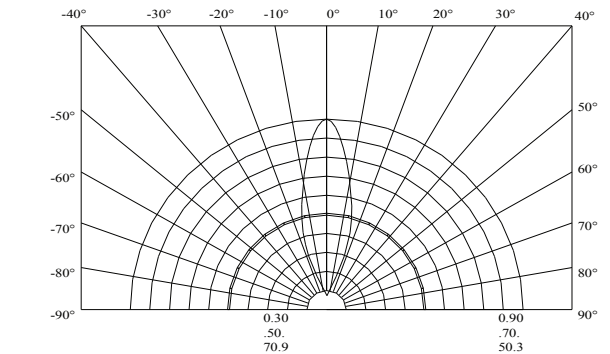
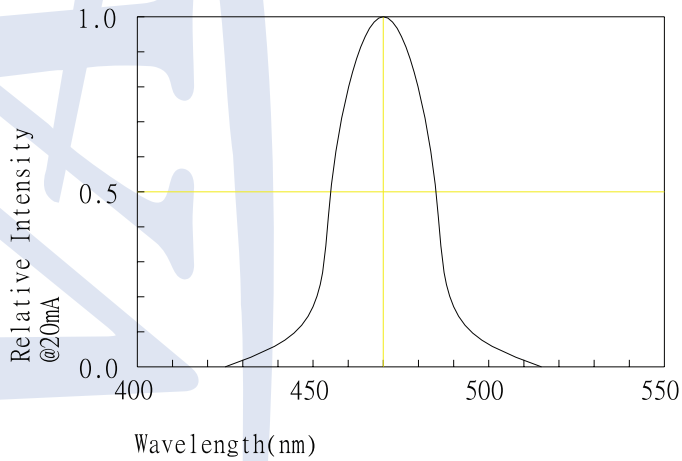


Fig2. Forward Current vs. Forward Voltage

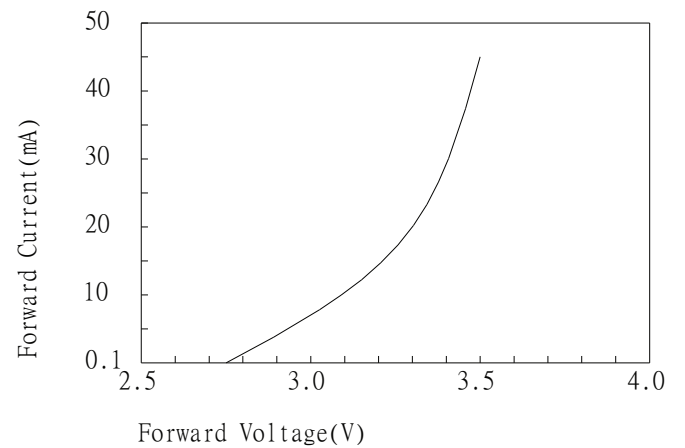


Fig3. Relative Intensity vs. Forward Current

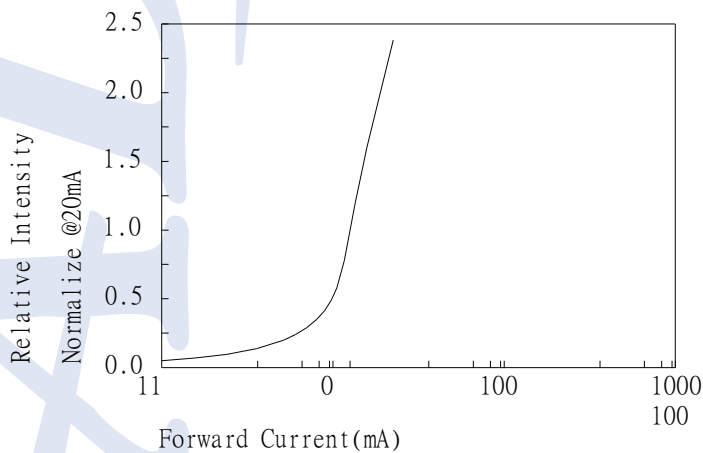


Fig4. Forward Voltage vs. Temperature

