

Light Emitting Diodes

Through Hole

AD Series

XTAL

OSC

VCXO
VCO

TCXO
VCTCXO

FLTR

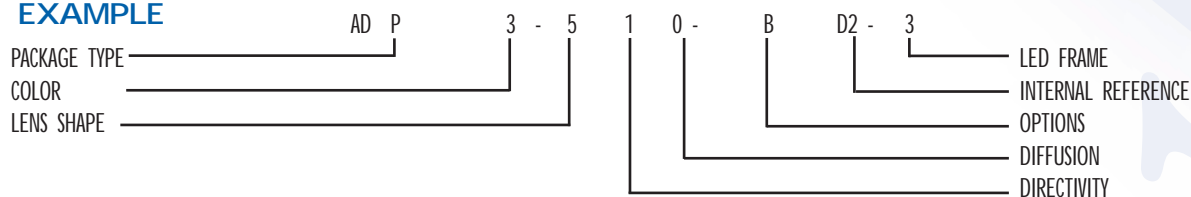
RES

IND

LED

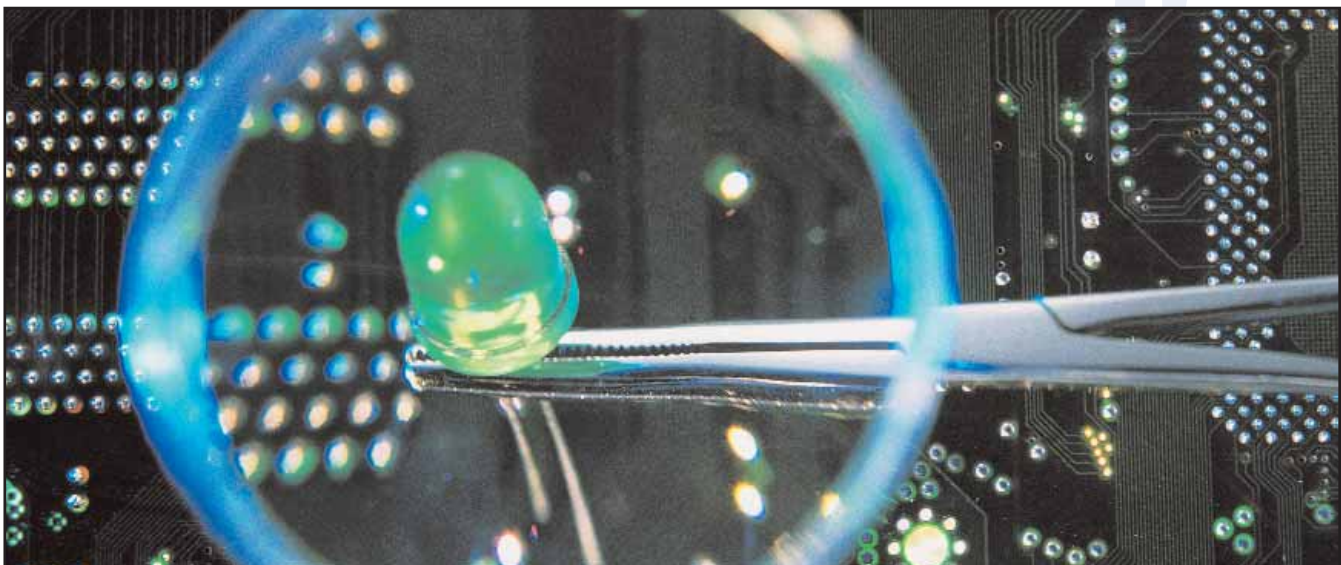
Package Type	Lamp Type	P	Can Type	H				
Color	White	0	Green (Gap)	3	Orange (GaAsp/Gap)	5	Blue (InGaN)	7
	Red (GaAsp)	1	Yellow (GaAsp/Gap)	4	HI-EFF-Red (GaAsp/Gap)5R		IR (GaAlAs)	8
	Hi-Red (Gap)	2	Amber (GaAsp/Gap)	40	Super Red (GaAlAs)	6	Pink	9
Lens Shape	±5mm	5	±7mm	7	Cylindrical	C	R	Rectangular
	±3mm	3	STEP	S	Triangular	T		
Directivity (Viewing Angle)	8°	H	20°	2	45°	4	60°	6
	15°	1	30°	3	50°	5	100°	0
Diffusion (Surface Coloring)	Water Clear	0	Color Diffused	1	White Diffused	2		
Options	Bulk	Blank	Tape & Reel	T				
Internal Reference	A-Z			0-9				
LED Frame	**	1	**	2	**	3	**	4

EXAMPLE



Precaution For Use

- Static electricity and surge damage the LEDs. It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.
- When forming leads, the leads should be bent at a point at least 3mm from the base of the epoxy bulb. Solder the LEDs no closer than 3mm from the base of the epoxy bulb.
- The products described in this brochure are intended to be used for general electronic equipment. Consult our sales staff in advance for information on the applications in which exceptional quality and reliability are required.
- The specifications of the product may be modified for improvement without prior notice. The formal specifications must be exchanged and signed by both parties before large volume purchase begins.



ADPU

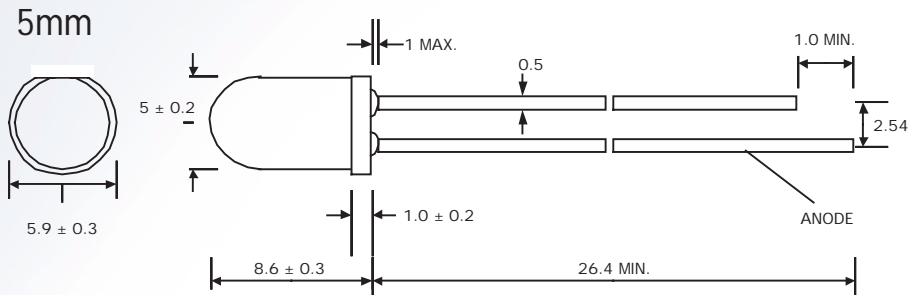


INTRODUCTION

The Adiva Through-hole LED is a spectacular choice for lighting up your next project. Low power consumption with high mcd output makes it a perfect candidate for indicator lights, mini-flashlights, or even a full-scale Las Vegas marquee. Longer than average life and ease of soldering leaves the Adiva through-hole LED lighting the way for the competition.

FEATURES

- High Luminous intensity, with a longer operation life
- Excellent consistency on color, intensity and Forward Current
- Low Current Application: Low power consumption
- Excellent Solderability and resistance to soldering heat
- High Reliability, 100% Probing Test



ABSOLUTE MAXIMUM RATINGS

Items	Symbols	Ratings	Unit
Operation Forward Current	I_f	30	mA
Peak Pulsed Forward Current	I_{pf}	100	mA
Operating Temperature Range	T_{op}	-30 ~ +85	C
Power Dissipation	T_d	120	mW
Reverse Voltage	I_{rz}	5	mA
Storage Temp. Range	T_s	-40 ~ +100	C
Soldering Temperature	T_{sol}	260	C

ELECTRICAL-OPTICAL CHARACTERISTICS

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 20mA$		4.0	4.5.	V
Reverse Voltage	V_R	$V_R = 5V$			10	V
Luminous Intensity*	I_V	$I_F = 20mA$				mcd
Viewing Angle	$2\theta_{1/2}$	$I_F = 20mA$		30		deg.
Peak Wavelength	λ_P	$I_F = 20mA$		355		nm
Dominant Wavelength	λ_D	$I_F = 20mA$				nm
Spectrum Radiation Bandwidth	$\Delta \lambda$	$I_F = 20mA$		20		nm

*Uses CIE standard colometric bins

Light Emitting Diodes

Through Hole

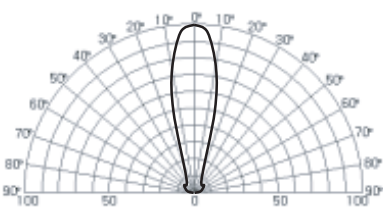
AD Series

SERIES STANDARD SPECIFICATIONS

Shape	Emitting Color	Part No.	Wave Length λ D(nm)	Diffusion	IR(μ A) VR=5V		Luminous Intensity (mcd) IF=20mA	Emitting Material	Viewing Angle 2θ 1/2 (deg.)
			Typ		MAX	Min	Typ		
5 \emptyset	UV	ADPU-530-BD13	395	3.5	4	10	35	50	30

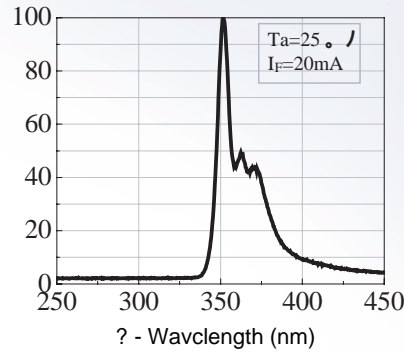
TYPICAL OPTICAL CHARACTERISTIC CURVES

Relative Luminous Intensity



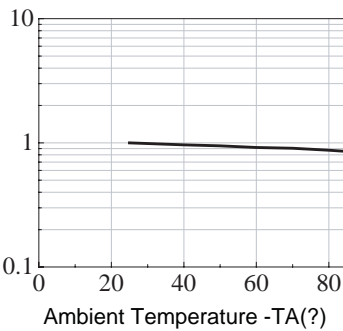
RADIATION DIAGRAM

Relative Luminous Intensity (%)
Normalized at $I_f=20mA$



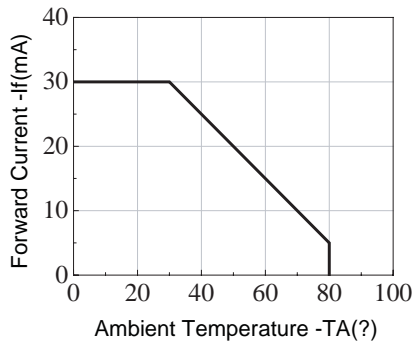
**RELATIVE LUMINOUS INTENSITY
Vs. WAVELENGTH**

Relative Luminous Intensity



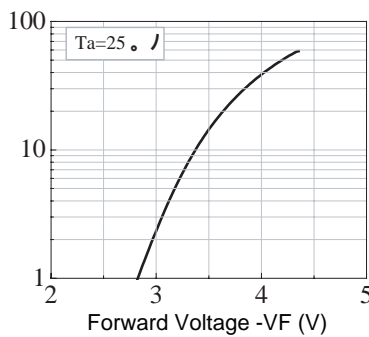
**LUMINOUS INTENSITY
Vs. AMBIENT TEMPERATURE**

Forward Current -If(mA)



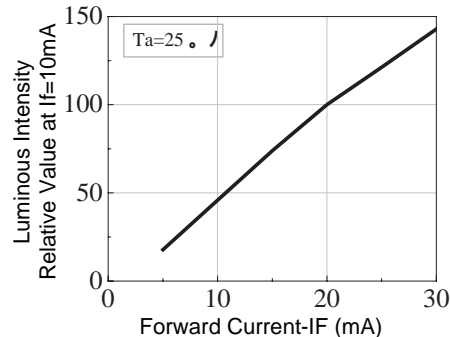
**FORWARD CURRENT
Vs. AMBIENT TEMPERATURE**

Forward Current -If(mA)



**FORWARD CURRENT
Vs. FORWARD VOLTAGE**

Luminous Intensity
Relative Value at $I_f=10mA$



**LUMINOUS INTENSITY
Vs. FORWARD CURRENT**

XTAL

OSC

VCXO
VCO

TCXO
VCTCXO

FLTR

RES

IND

LED

LED LIGHT EMITTING DIODES