

Light Emitting Diodes

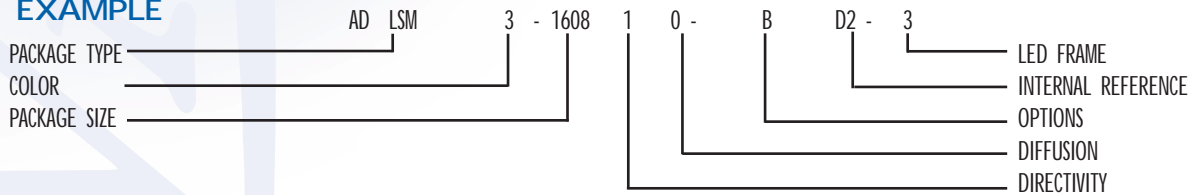
Surface Mount

AD Series



Package Type	LSM		LSV					
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	6	IR (GaAlAs)	8
	Hi-Red (Gap)	2	Amber (GaAsp/Gap)	40	Super Red (GaAlAs)	6	Pink	9
Package Size	1608		2812		3528			
Directivity (Viewing Angle)	8°	H	30°	3	60°	6	120°	8
	15°	1	45°	4	100°	0	160°	9
	20°	2	50°	5	110°	7		
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



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ADLSM-1608



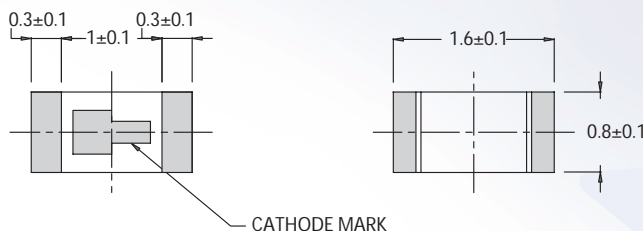
INTRODUCTION

The Adiva Surface Mount LED has a wide range of applications, from telecommunication products, such as cellular phones, radios, and television tuners, to simply being a perfect candidate for an indicator light on any electronic device. The small size has an advantage over larger LEDs, and still outshines the competition by using the finest technology used to emit the purest and brightest colors.

FEATURES

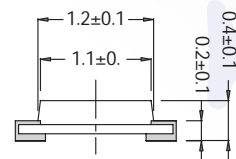
- High Luminous intensity, with a longer operation life
- Excellent consistency on color, intensity and Forward Current
- Low Current Application: Low power consumption
- Excellent Solderability and resistance to soldering heat
- High Reliability, 100% Probing Test

1608



ABSOLUTE MAXIMUM RATINGS

Items	Symbols	Ratings	Unit
Operation Forward Current	I_f	20	mA
Peak Pulsed Forward Current	I_{pf}	50	mA
Operating Temperature Range	T_{sol}	-25 ~ +85	°C
Power Dissipation	P_d	70	mW
Forward Voltage	V_f	2	V
Reverse Voltage	V_r	5	V
Storage Temp. Range	T_{stg}	-30 ~ +100	°C
Soldering Temperature	T_{sol}	240°C for 5sec.	°C



ELECTRICAL-OPTICAL CHARACTERISTICS

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	V_f	$I_f = 20\text{mA}$	2.0	2.5	3.0	V
Reverse Voltage	V_R	$V_R = 5\text{V}$		5		V
Luminous Intensity*	I_v	$I_f = 20\text{mA}$	20	150	210	mcd
Viewing Angle	$2\theta_{1/2}$	$I_f = 20\text{mA}$		80		deg.
Coordinates	λ_p	$I_f = 20\text{mA}$.27-.30		.30-.33	

XTAL

OSC

VCXO
VCO

TCXO
VCTCXO

FLTR

RES

IND

LED

LIGHT EMITTING DIODES

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SERIES STANDARD SPECIFICATIONS

Shape	Emitting Color	Part No.	Chromacity Coordinates*		Luminous Intensity (mcd) IF=20mA		Emitting Material	Viewing Angle 2θ1/2 (deg.)
			X	Y	Min	Typ		
1608	WHITE	ADLSM0-1608-90T	.27-.32	.27-.33	20	210	InGaN	160
1608	BLUISH WHITE	ADLSM70-1608-90T	.20-.22	.145-.18	85	210	InGaN	160

*Uses CIE standard colometric bins

Fig. 1 IF-VF

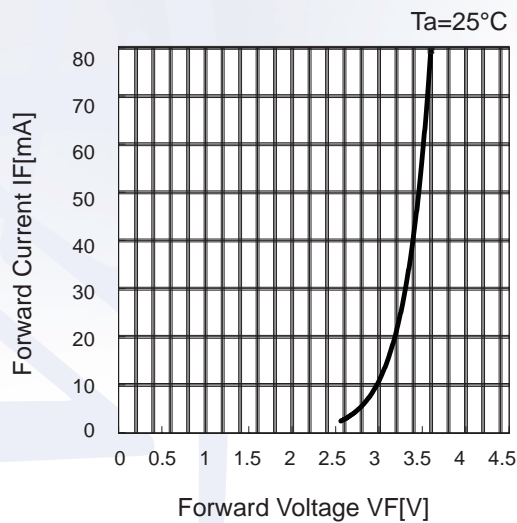


Fig. 2 IV-IF

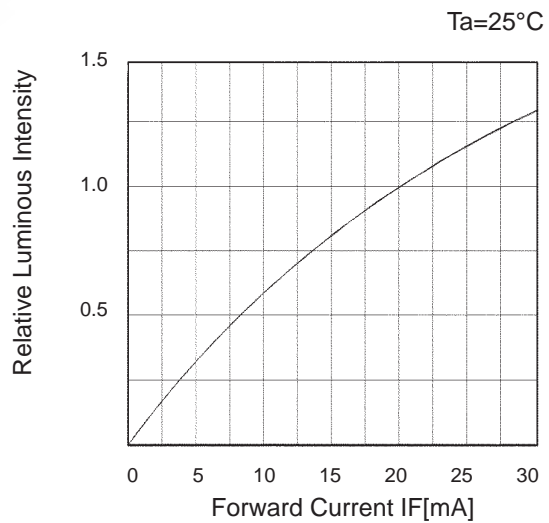


Fig. 3 IF-Ta

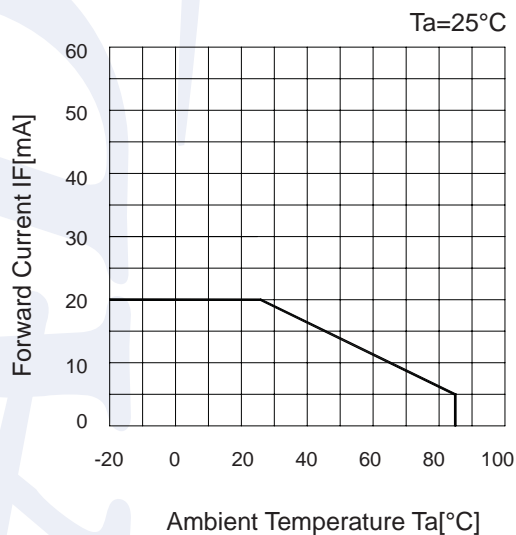


Fig. 4 Spectrum Distribution

