

Light Emitting Diodes

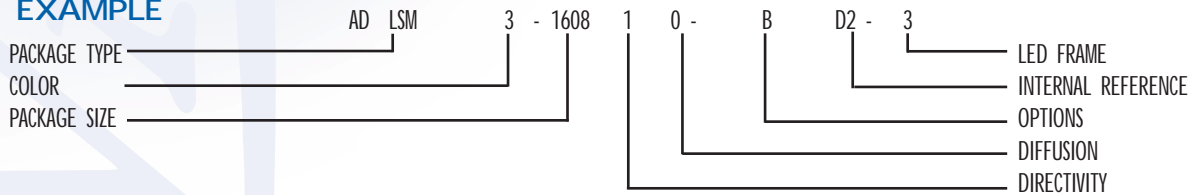
Surface Mount

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



ADLSV-2812



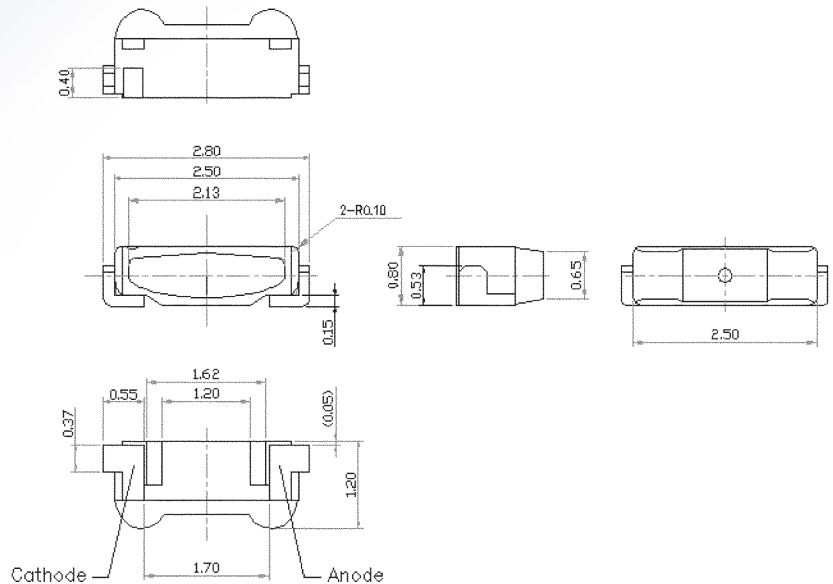
INTRODUCTION

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

2812



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_{sol}	-30 ~ +85	C
Power Dissipation	P_d	120	mW
Forward Voltage	V_f	2	V
Reverse Voltage	V_R	5	mV
Storage Temp. Range	T_{stg}	-40 ~ +100	C
Soldering Temperature	T_{sol}	260 for 5	C

ELECTRICAL-OPTICAL CHARACTERISTICS

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 20\text{mA}$	2.0	2.5	3.6	V
Reverse Voltage	V_R	$V_R = 5\text{V}$	1.8		5	V
Luminous Intensity*	I_v	$I_F = 20\text{mA}$	360	700	1440	mcd
Viewing Angle	2 θ 1/2	$I_F = 20\text{mA}$			110	deg.
Coordinates	λ, P	$I_F = 20\text{mA}$.287-.33		.276-.339	

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Surface Mount

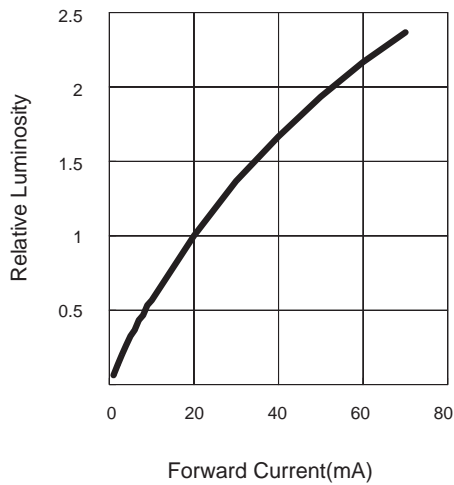
AD Series

SERIES STANDARD SPECIFICATIONS

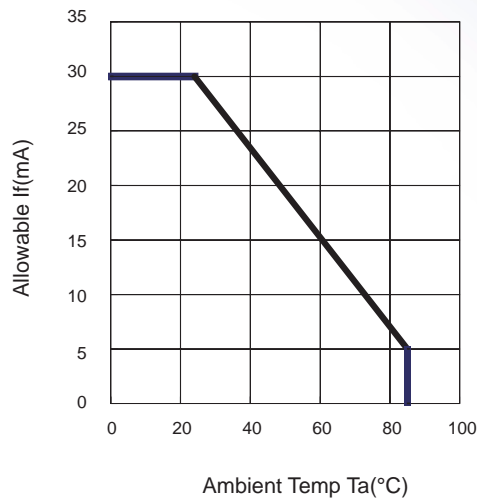
Shape	Emitting Color	Part No.	Chromacity Coordinates*		Luminous Intensity (mcd) IF=20mA		Emitting Material	Viewing Angle 2θ1/2 (deg.)
			X	Y	Min	Typ		
2812	WHITE	ADLSV0-2812-70T	.287-.33	.276-.339	360	1440	InGaN	110
2812	BLUISH WHITE	ADLSV70-2812-70T	.18-.22	.11-.14	190	360	InGaN	110

*Uses CIE standard colometric bins

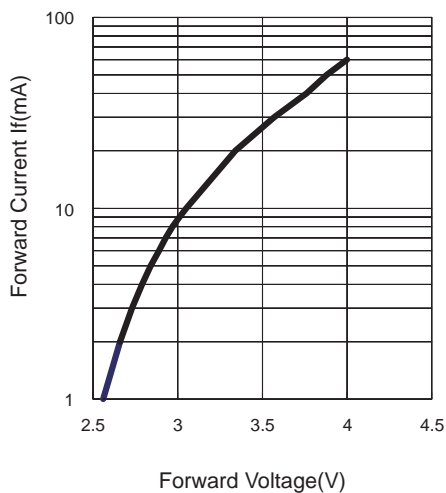
(1) Relative Luminous Intensity vs Forward Current (IF-Iv)



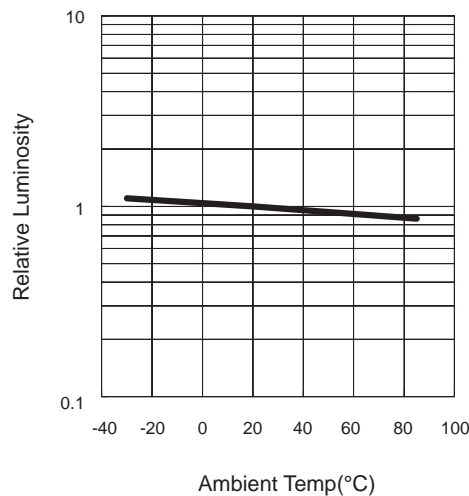
(2) Max. Permissible Forward Current



(3) Forward Current vs Forward Voltage (If-Vf)



(4) Ambient Temperature vs Relative Luminosity



XTAL

OSC

VCXO
VCO

TCXO
VCTCXO

FLTR

RES

IND

LED

183 LIGHT EMITTING DIODES