

# Light Emitting Diodes

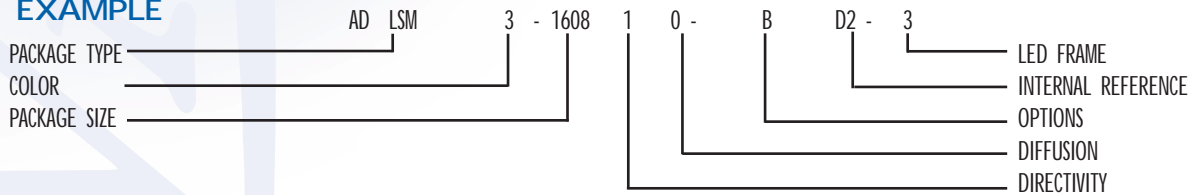
Surface Mount

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

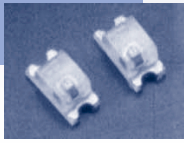


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## ADLSM-3528

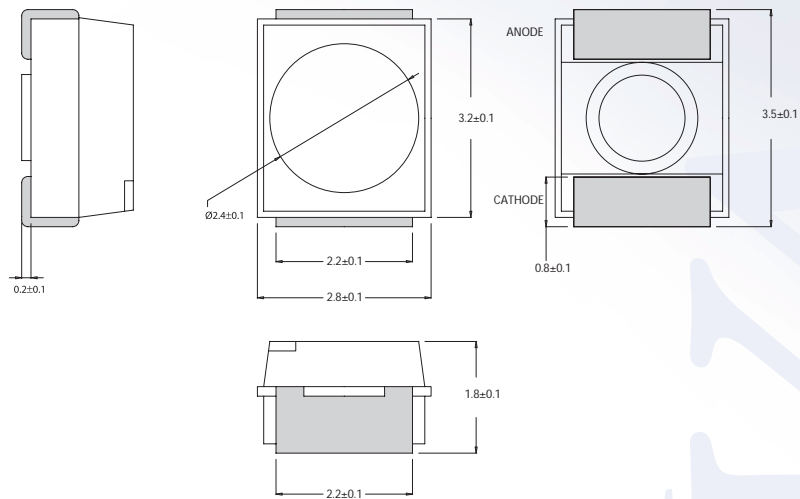


### INTRODUCTION

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.

- 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

3528



### 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	V
Storage Temp. Range	$T_{stg}$	-40 ~ +100	C
Soldering Temperature	$T_{sol}$	250 for 5	C

### ELECTRICAL-OPTICAL CHARACTERISTICS

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	$V_f$	$I_f = 20\text{mA}$	2.0	3.2	3.6	V
Reverse Voltage	$V_R$	$V_R = 5\text{V}$	0.8	1.0	1.5	V
Luminous Intensity*	$I_v$	$I_f = 20\text{mA}$	300	550	850	mcd
Viewing Angle	$2\theta_{1/2}$	$I_f = 20\text{mA}$		60	120	deg.
Wavelength	$\lambda_P$	$I_f = 20\text{mA}$	520	525	535	nm

XTAL

OSC

VCXO  
VCO

TCXO  
VCTCXO

FLTR

RES

IND

LED

LIGHT EMITTING DIODES

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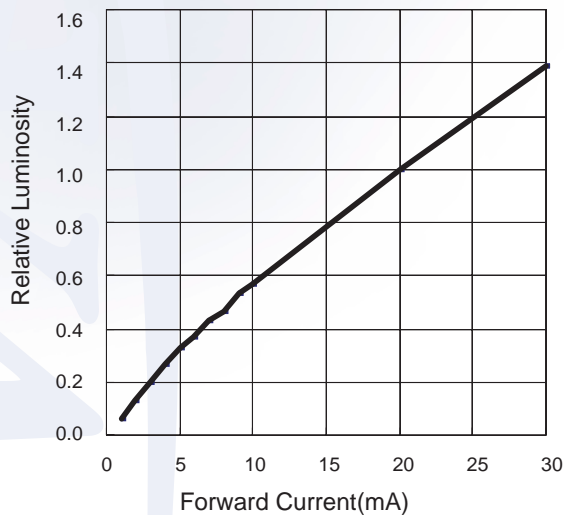


## SERIES STANDARD SPECIFICATIONS

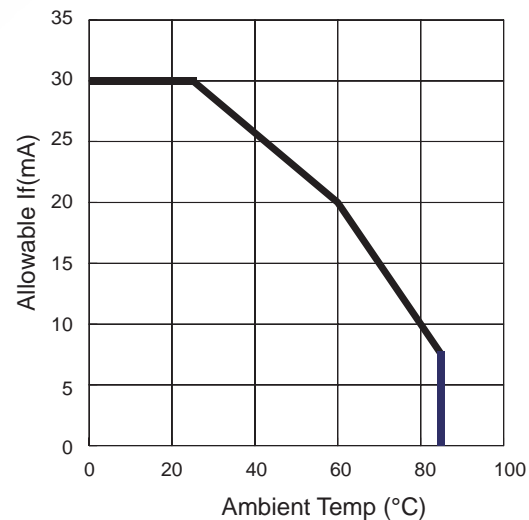
Shape	Emitting Color	Part No.	Chromacity Coordinates*		Luminous Intensity (mcd) IF=20mA		Emitting Material	Viewing Angle 2θ1/2 (deg.)
			X	Y	Min	Typ		
3528	WHITE	ADLSM-3528-80T	.27-.33	.24-.37	300	850	InGaN	120

\*Uses CIE standard colometric bins

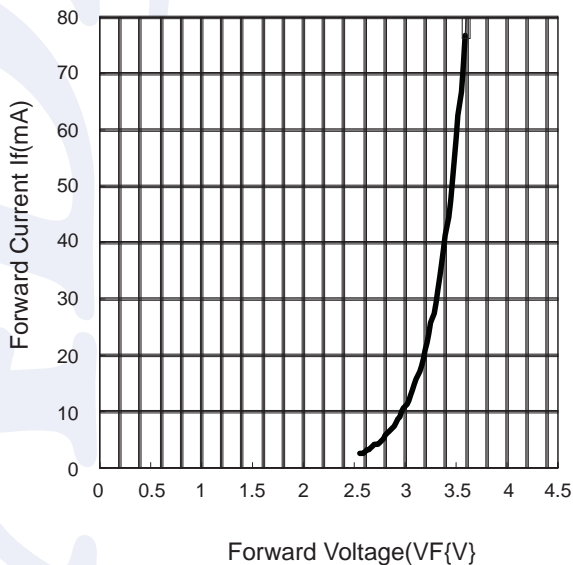
(1) Relative Luminous Intensity vs Forward Current (IF-Iv)



(2) Max. Permissible Forward Current



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



(4) Ambient Temperature vs Relative Luminosity

