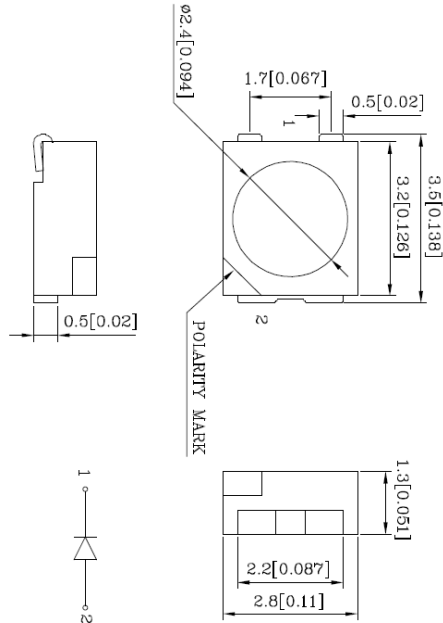


## Package Dimensions

P/N: EMYL109S  
3.5X2.8MM YELLOW SMD LED



### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25$  (0.01") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=150mA) mcd		Luminous Flux (IF=150mA) mlm		Wavelength nm $\lambda P$	Viewing Angle $2\theta 1/2$ [2]
			min.	typ.	min.	typ.		
Yellow	AlInGaP	Water Clear	1600	2990	3000	6000	590	120°

### Absolute Maximum Ratings at TA=25°C

Parameter	Symbol	Value	Unit
Power Dissipation	Pt	615	mW
Junction Temperature [1]	Tj	110	°C
Operating Temperature	Top	-40 To +85	°C
Storage Temperature	Tstg	-40 To +85	°C
DC Forward Current [1]	If	150	mA
Peak Forward Current [3]	IfM	200	mA
Thermal Resistance [1] (junction/ambient)	Rthj-a	210	°C/W
Thermal Resistance [1] (junction/solder point)	Rthj-s	90	°C/W

### Notes:

1. Results from mounting on PC board FR4 (pad size  $2.70\text{mm}^2$ ), mounted on pc board-metal core PCB is recommend for lowest thermal Resistance.
2.  $1/2$  is the angle from optical centerline where the luminous intensity is  $1/2$  the optical centerline value.
3. 1/10 Duty Cycle, 0.1ms Pulse Width.

### Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{\text{peak}}$	Peak Wavelength	Yellow	590		nm	IF=150mA
$\lambda_D$	Dominant Wavelength	Yellow	590		nm	IF=150mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Yellow	20		nm	IF=150mA
C	Capacitance	Yellow	20		pF	VF=0V, f=1MHz
VF	Forward Voltage	Yellow	3.6	4.1	V	IF=150mA
IR	Reverse Current	Yellow		10	uA	VR = 5V