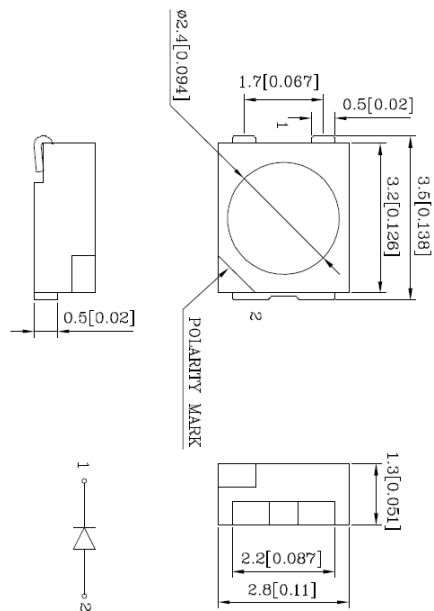


Package Dimensions

P/N: EMOL109S
3.5X2.8MM RED-ORANGE SMD LED



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 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 λP	Viewing Angle $2\theta 1/2 [2]$
			min.	typ.	min.	typ.		
Red	AlInGaP	Water Clear	3800	5990	2500	4000	626	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	350	mA
Thermal Resistance [1] (Junction/ambient)	Rthj-a	200	°C/W
Thermal Resistance [1] (Junction/solder point)	Rthj-s	80	°C/W

Notes:

1. Results from mounting on PC board FR4 (pad size $\geq 70\text{mm}^2$), mounted on pc board-metal core PCB is recommend for lowest thermal Resistance.
2. $\theta 1/2$ 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
λ peak	Peak Wavelength	Red	626		nm	IF=150mA
λD	Dominant Wavelength	Red	618		nm	IF=150mA
$\Delta\lambda 1/2$	Spectral Line Half-width	Red	20		nm	IF=150mA
C	Capacitance	Red	25		pF	VF=0V, f=1MHz
VF	Forward Voltage	Red	3.6	4.1	V	IF=150mA
IR	Reverse Current	Red		10	uA	VR = 5V