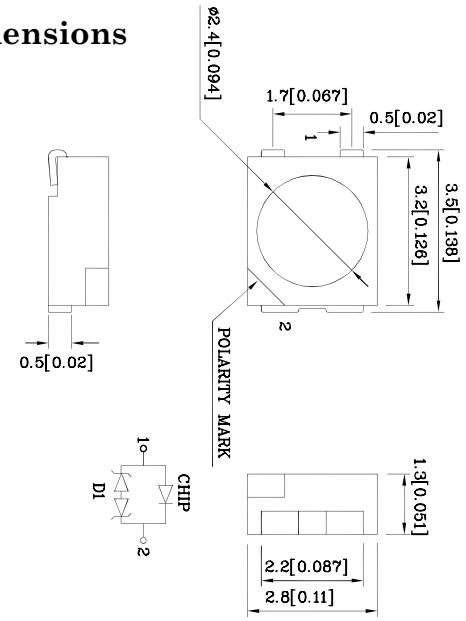
Package Dimensions



P/N: ECW109S
3.5X2.8MM WHITE SMD LED

Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=150mA) mcd		Luminous Flux (IF=150mA) mlm		Viewing Angle 2 θ 1/2
			min.	typ.	min.	typ.	
White	InGaN	Water Clear	7500	10000	24000	33000	120°

Absolute Maximum Ratings at T_A=25°C

Parameter	Symbol	Value	Unit
Power Dissipation	P_d	600	mW
Reverse Voltage	V_R	5	V
Junction Temperature [1]	T_J	110	°C
Operating Temperature	Top	-40 To +85	°C
Storage Temperature	Tstg	-40 To +85	°C
DC Forward Current [1]	I_F	150	mA
Peak Forward Current [2]	I_{FM}	300	mA
Thermal Resistance [1] (Junction/ambient)	$R_{th\ j\text{-}a}$	180	°C/W
Thermal Resistance [1] (Junction/solder point)	$R_{th\ j\text{-}S}$	60	°C/W
Electrostatic Discharge Threshold (HBM)		8000	V

Electrical / Optical Characteristics at T_A=25°C

Parameter	Symbol	Value	Unit
Forward Voltage I_F = 150mA [Min.]	V_F [2]	2.7	V
Forward Voltage I_F = 150mA [Typ.]		3.5	
Forward Voltage I_F = 150mA [Max.]		4.0	
Reverse Current V_R=5V [Max.]	I_R	10	uA
Chromaticity coordinate x acc. to CIE1931 I_F = 150mA [Typ.]	x [1]	0.31	-
Chromaticity coordinate y acc. to CIE1931 I_F = 150mA [Typ.]	y [1]	0.31	-
Temperature coefficient of x I_F = 150mA, -10°C ≤ T≤ 100°C [Typ.]	TC x	-0.15	10^{-3}/°C
Temperature coefficient of y I_F = 150mA, -10°C ≤ T≤ 100°C [Typ.]	TCy	-0.13	10^{-3}/°C
Temperature coefficient of V_F I_F = 150mA, - 10°C ≤ T≤ 100°C [Typ.]	TC_V	-3.1	mV/°C