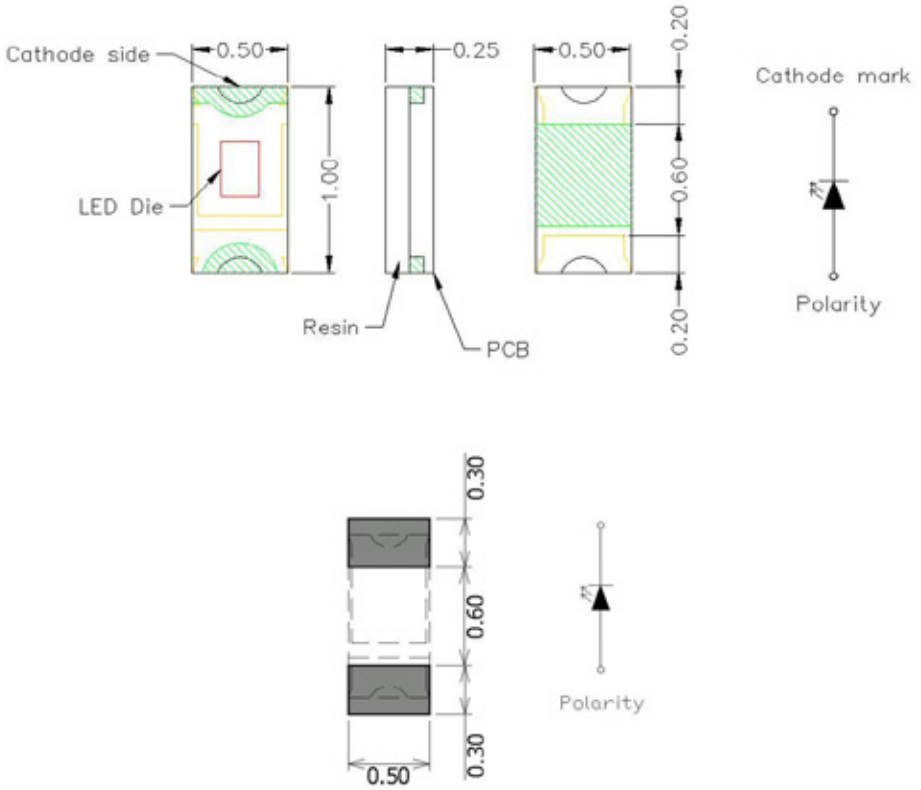
SPECIFICATION CS42EG2C

PACKAGE OUTLINES



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

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle
CS42EG2C	InGaAlP	Green	Water Clear	130°

RoHS Compliant Lead Free

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ABSOLUTE MAXIMUM RATINGS (TA=25°C)

Parameter	Symbol	Max Rating	Unit
Forward Current	I_F	20	mA
Reverse Current @ 5V	I_R	10	μA
Power Dissipation	Pd	50	mW
Operating Temperature Range	T_{OP}	-40~+85	°C
Storage Temperature Range	T_{STG}	-40~+100	°C
Peak Pulsing Current (1/10 duty f = 10KHz)	I_{FP}	30	mA
Soldering Temperature	T_{SOL}	Max 260°C for 10 sec Max	

OPTICAL-ELECTRICAL CHARACTERISTICS (TA=25°C)

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Luminous Intensity	Iv	I_F = 5mA	-	13	-	mcd
Forward Voltage	V_F	I_F = 5mA	-	1.9	2.3	V
Reverse Leakage Current	I_R	V_R = 5V	-	10	-	μA
Viewing Angle at 50% Iv	2θ1/2	I_F = 5mA	-	130	-	Deg
Peak Wavelength	λ_P	I_F = 5mA	-	572	-	nm
Dominant Wavelength	λ_D	I_F = 5mA	-	569	-	nm

*Tolerance of viewing angle: -10 / +5 deg.

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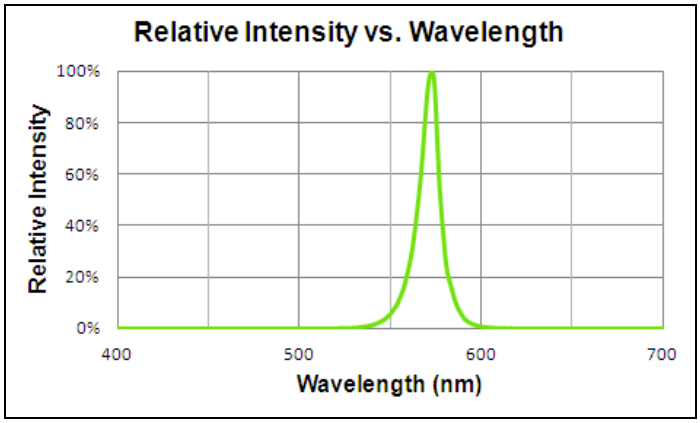
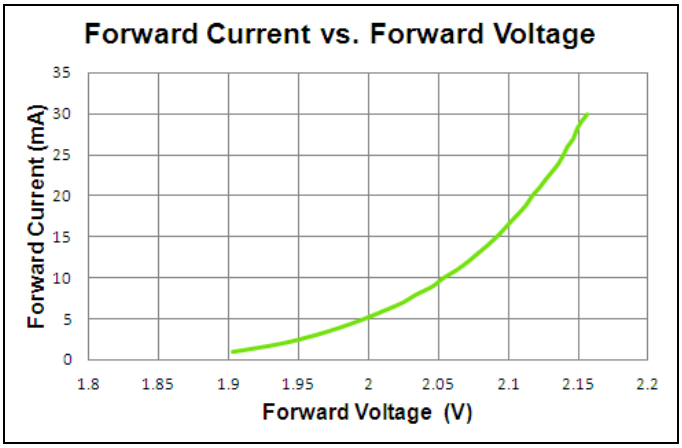
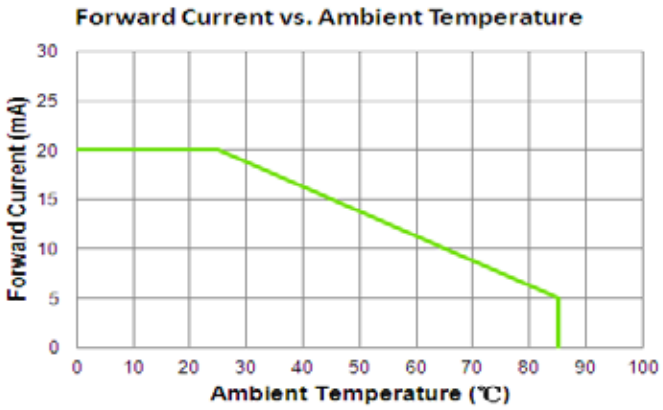
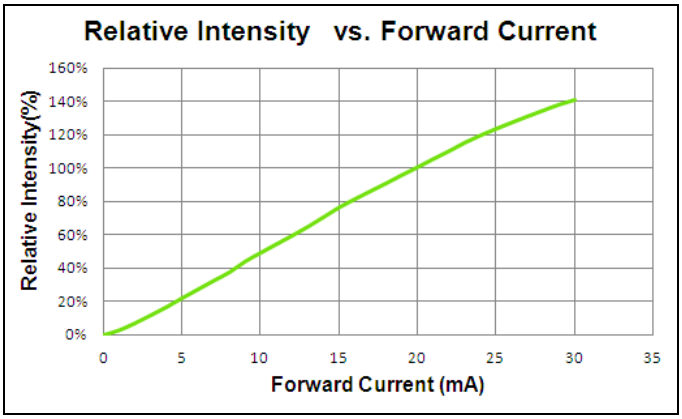
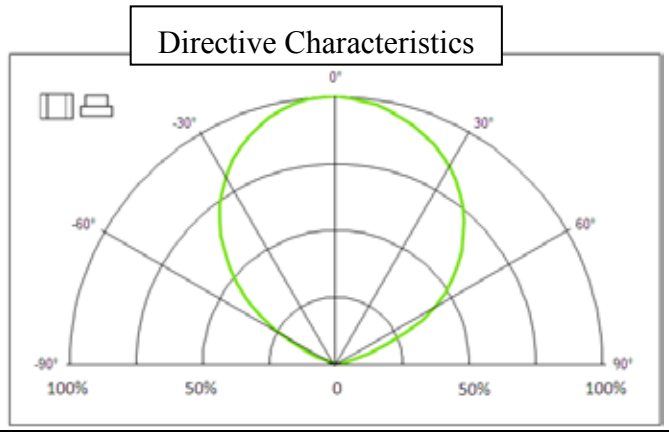
OPTICAL CHARACTERISTIC CURVES

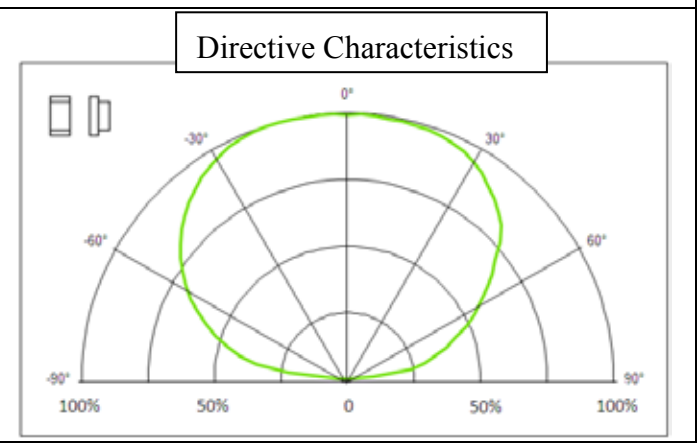












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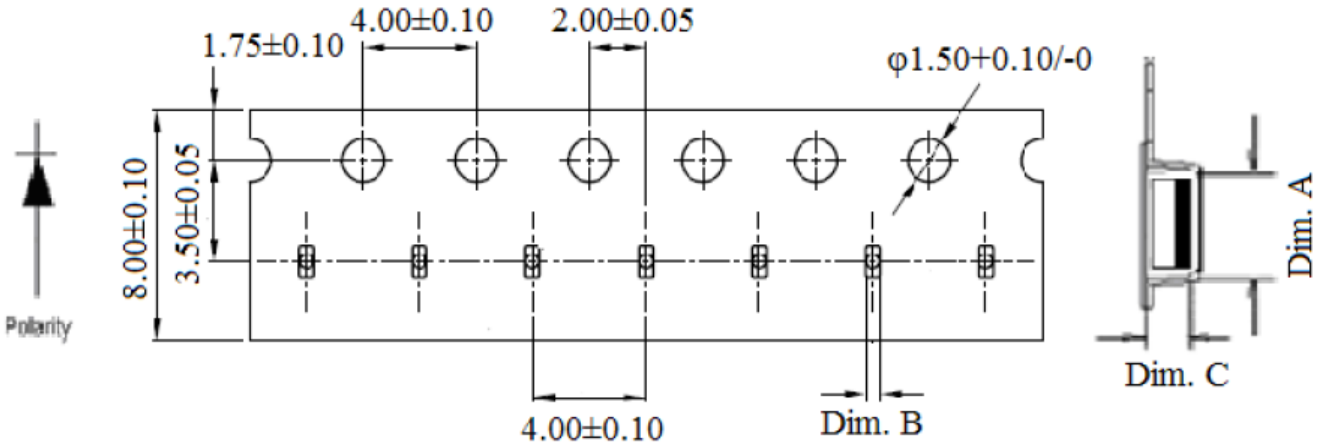
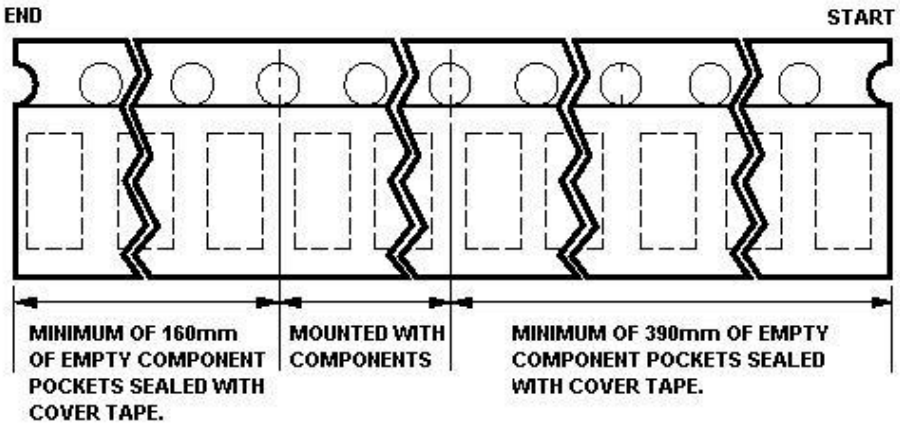
PACKAGING SPECIFICATION



Dim. A	Dim. B	Dim. C	Q'ty/Reel
1.11±0.03	0.60±0.03	0.38±0.03	3K

Unit: mm



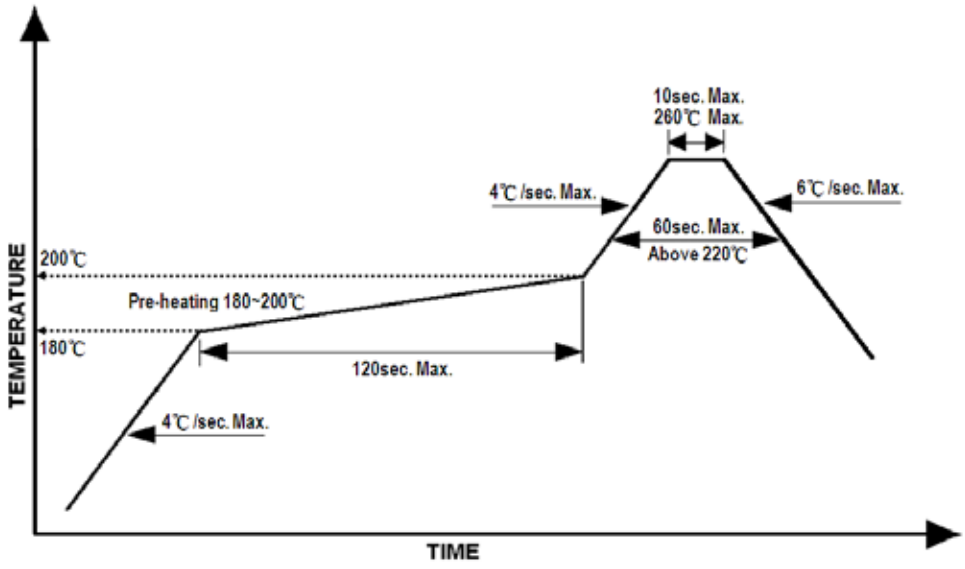
SOLDERING CONDITIONS

Reflow Soldering

Recommend soldering paste specifications:

1. Operating temp.: Above 220 ℃ ,60 sec.
2. Peak temp.:260 ℃Max.,10sec Max.
3. Reflow soldering should not be done more than two times.
4. Never attempt next process until the component is cooled down to room temperature after reflow.
5. The recommended reflow soldering profile (measured on the surface of the LED terminal) is as following:

Lead-free Solder Profile



Reworking

- Rework should be completed within 5 seconds under 260℃.
- The iron tip must not come in contact with the copper foil.
- Twin-head type is preferred.

Cleaning

Following are cleaning procedures after soldering:

- An alcohol-based solvent such as isopropyl alcohol (IPA) is recommended.
- Temperature x Time should be 50℃ x 30sec. or <30℃ x 3min
- Ultrasonic cleaning: < 15W/ bath; bath volume ≤ 1liter
- Curing: 100℃ max, <3min