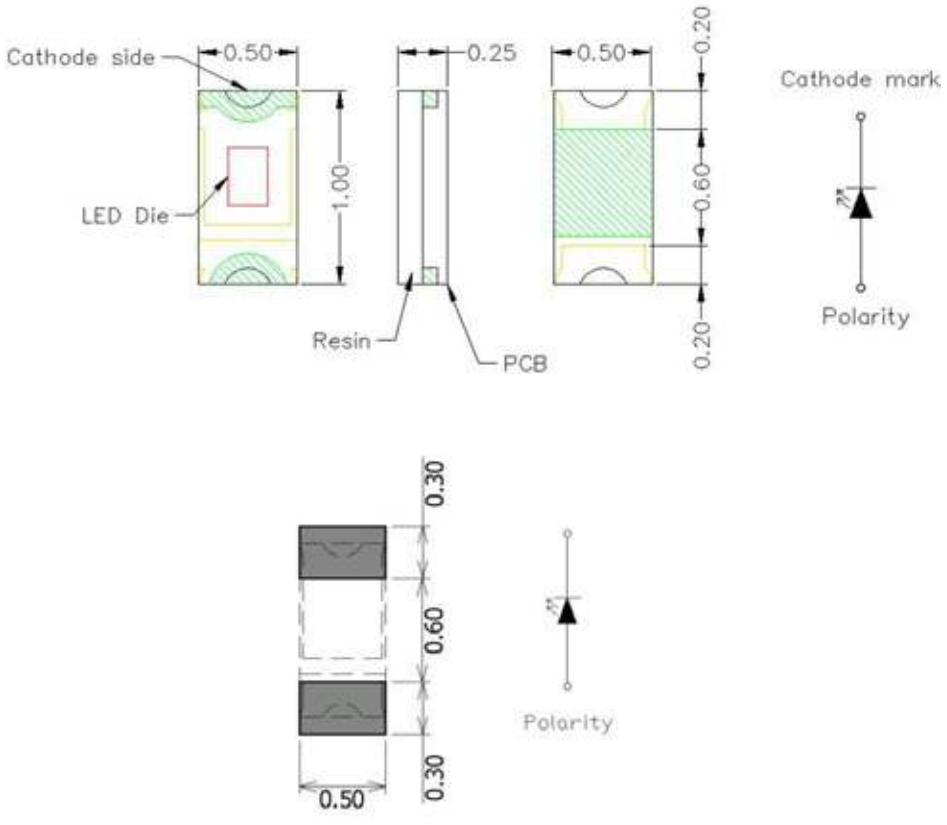


SPECIFICATION **CS42ER2C**
PACKAGE OUTLINES


- Notes:
1. All dimensions are in millimeters (inches).
 2. Tolerance is $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.
 3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle
CS42ER2C	InGaAlP	Red	Water Clear	130°



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ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

Parameter	Symbol	Max Rating	Unit
Forward Current	IF	20	mA
Reverse Current @ 5V	IR	10	μA
Power Dissipation	Pd	50	mW
Operating Temperature Range	TOP	-40~+85	°C
Storage Temperature Range	TSTG	-40~+100	°C
Peak Pulsing Current (1/10 duty f = 10KHz)	IFP	30	mA
Soldering Temperature	TSOL	Max 260°C for 10 sec Max	

OPTICAL-ELECTRICAL CHARACTERISTICS
(TA=25°C)

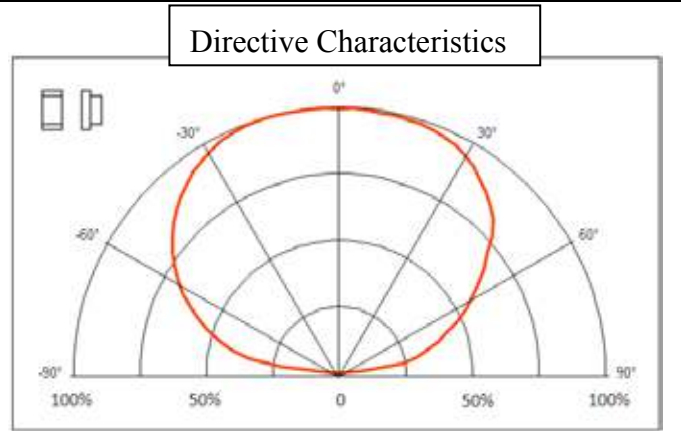
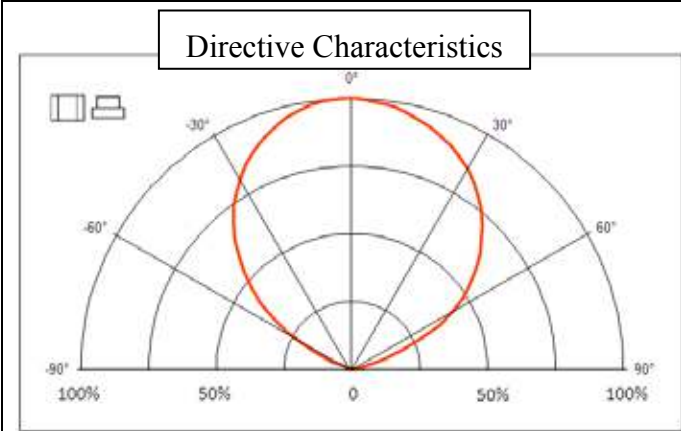
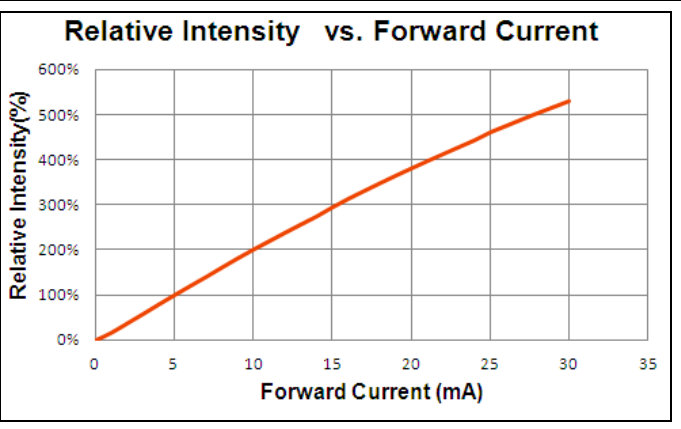
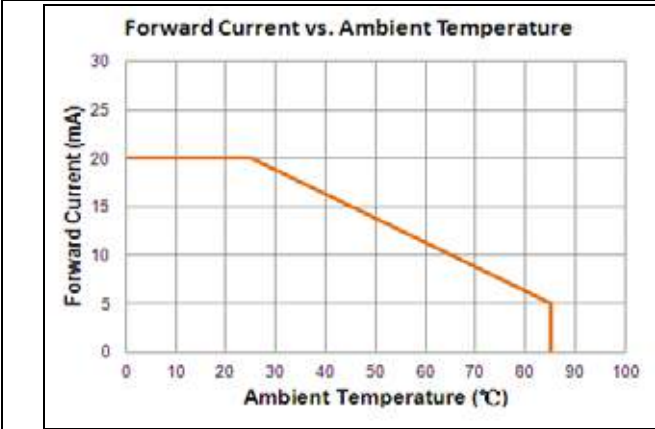
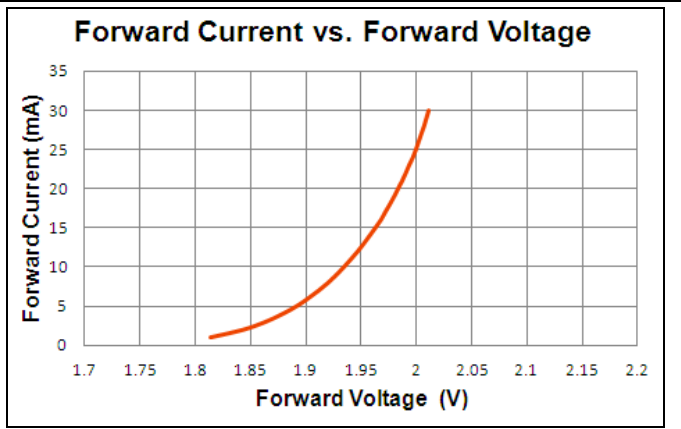
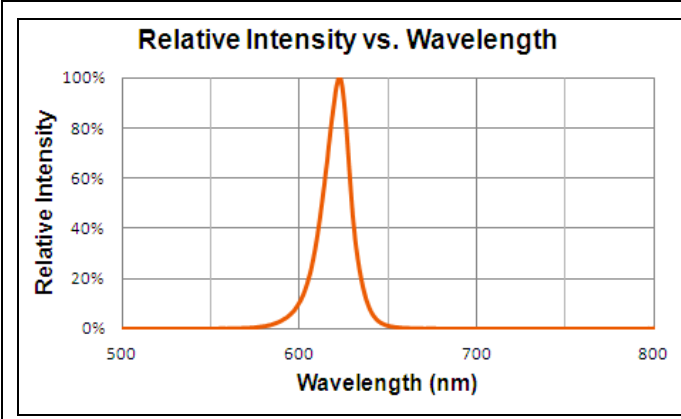
Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Luminous Intensity	Iv	IF = 5mA	-	25	-	mcd
Forward Voltage	VF	IF = 5mA	-	2.0	2.4	V
Reverse Leakage Current	IR	VR = 5V	-	10	-	μA
Viewing Angle at 50% Iv	2θ1/2	IF = 5mA	-	130	-	Deg
Peak Wavelength	λP	IF = 5mA	-	622	-	nm
Dominant Wavelength	λD	IF = 5mA	-	615	-	nm

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



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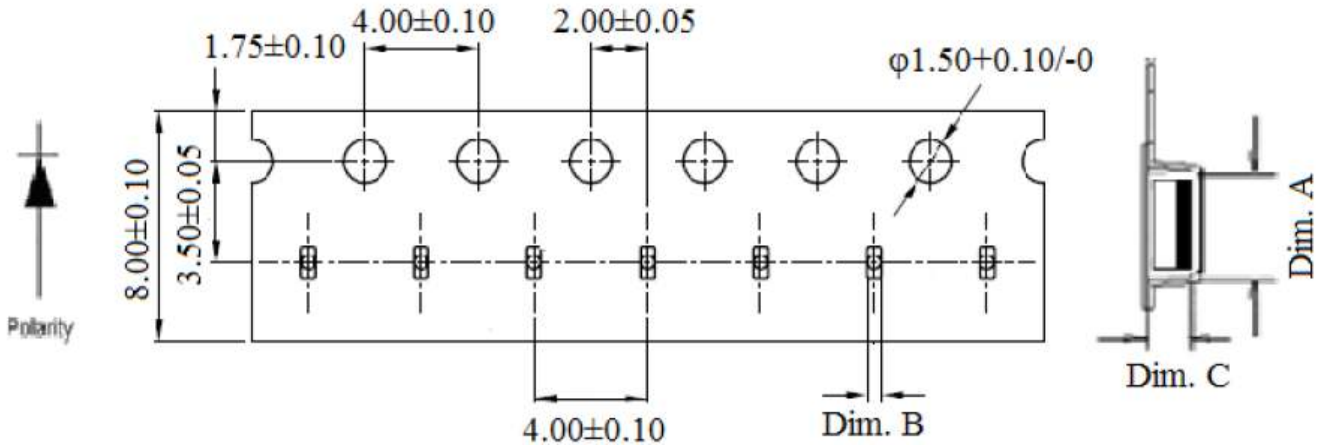
OPTICAL CHARACTERISTIC CURVES



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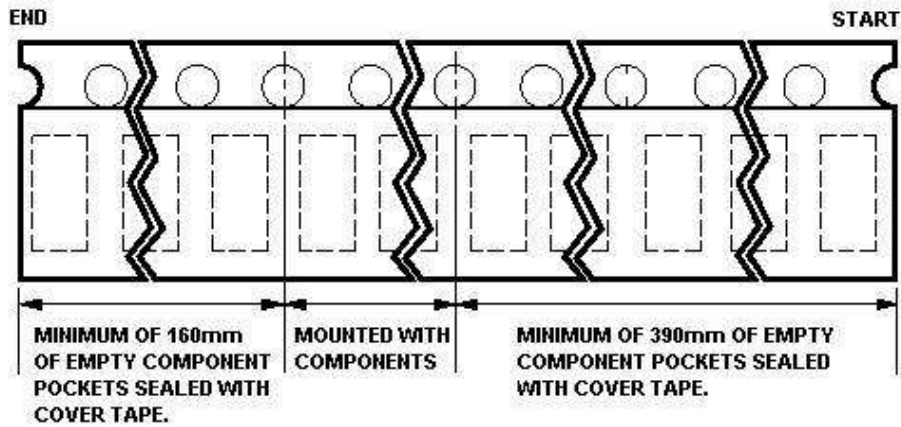
PACKAGING SPECIFICATION

Tape Dimension



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

Unit: mm



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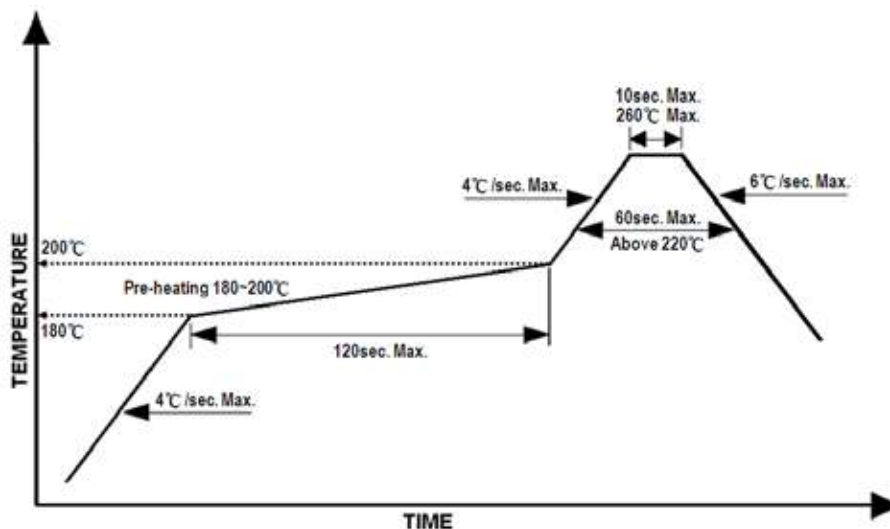
SOLDERING CONDITIONS

Reflow Soldering

Recommend soldering paste specifications:

1. Operating temp.: Above 220°C ,60 sec.
2. Peak temp.:260°C 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°C.
- 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°C x 30sec. or <30°C x 3min
- Ultrasonic cleaning: < 15W/ bath; bath volume ≤ 1liter
- Curing: 100°C max, <3min



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