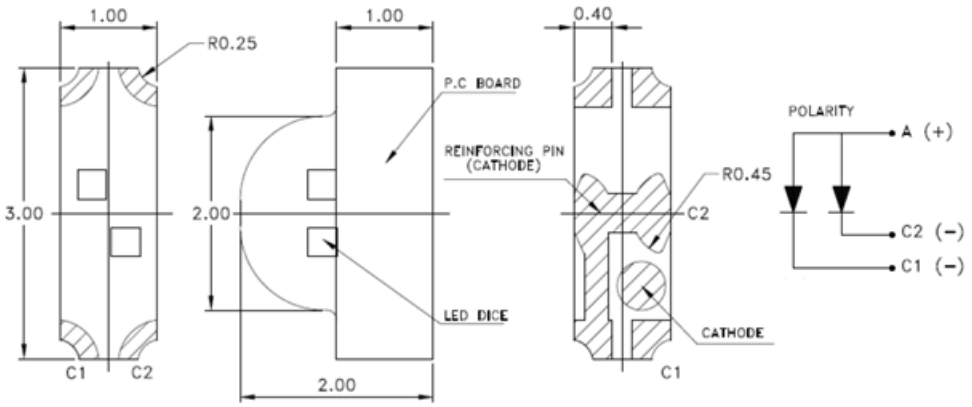
HSMF-C143
Side View SMT ChipLED
Data Sheet

Lead (Pb) Free
RoHS 6 fully
compliant

Caution: This LED is class 1A ESD sensitive. Please observe appropriate precautions during handling and processing.

Package Dimensions



- All dimensions are in mm.
- Tolerance ±0.1mm unless otherwise specified.

Device Selection Guide

Part Number	Color	Package
HSMF-C143	AlInGaP Amber (C1) / AlInGaP Green (C2)	Water Clear

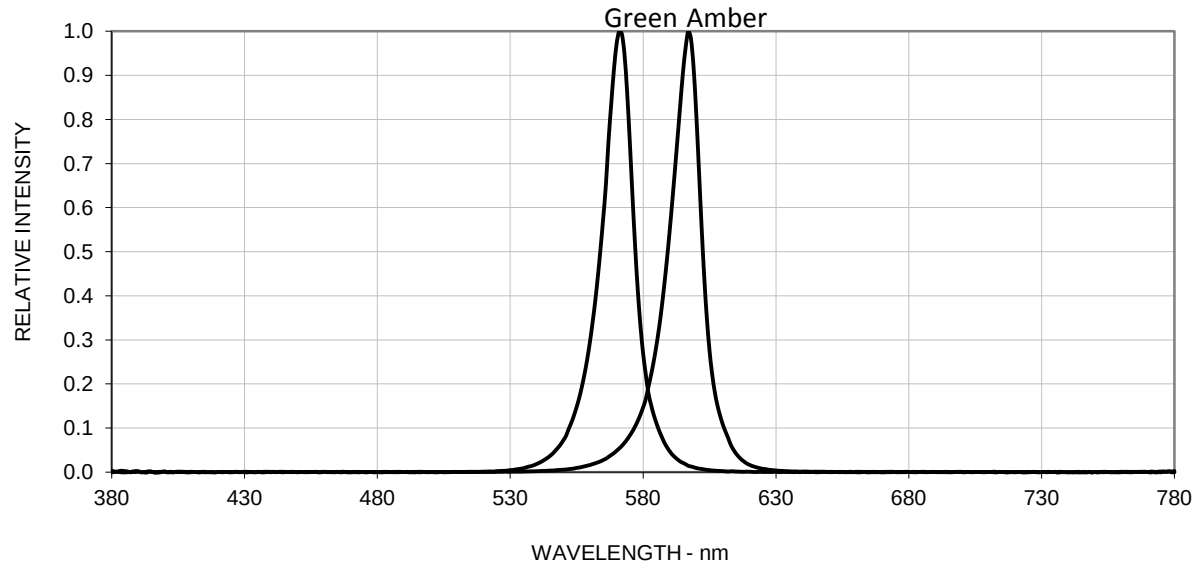
Absolute Maximum Value at T_A = 25°C

Parameter	AlInGaP	Unit
Forward current	30	mA
Power dissipation	72	mW
Operating temperature	-30 to 85	°C
Storage temperature	-40 to 85	°C
Reverse voltage	Not recommended	V

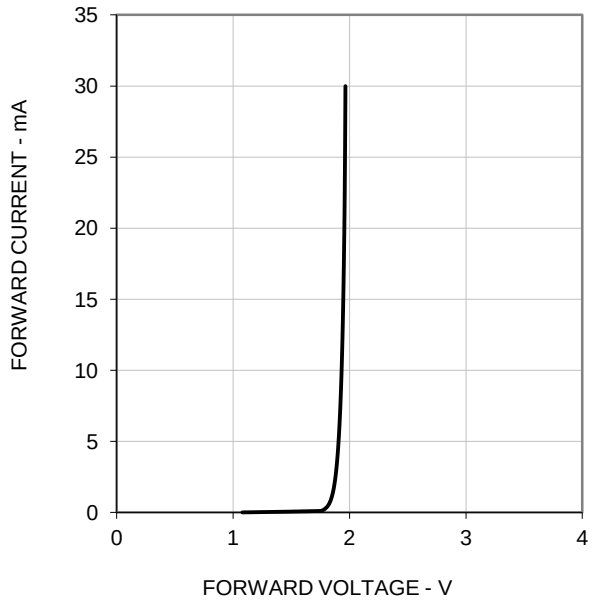
Optical/Electrical Characteristics at T_A = 25°C, If=20mA

Color	Luminous intensity(mcd)		Dominant wavelength(nm)	Peak wavelength(nm)	Viewing angle(°)	Forward voltage(V)	
	Min	Typ	Typ	Typ	Typ	Min	Max
AlInGaP Green	18	33	570	571	120	1.6	2.4
AlInGaP Amber	28.5	103	589	591	120	1.6	2.4

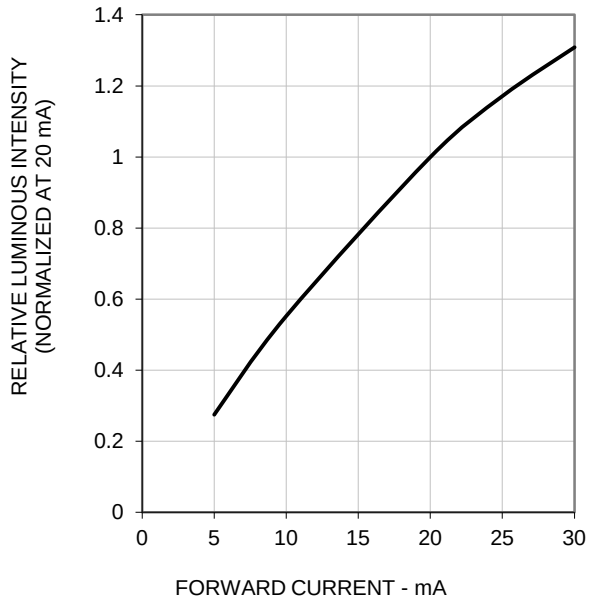
- Forward voltage tolerance is ±0.1V.



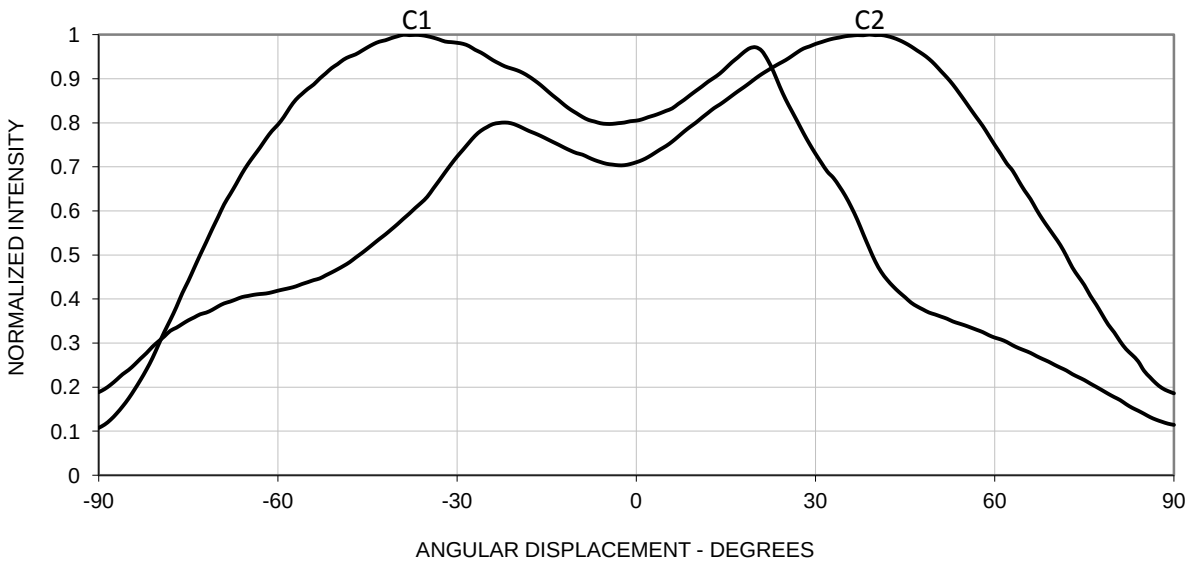
Relative intensity vs Wavelength



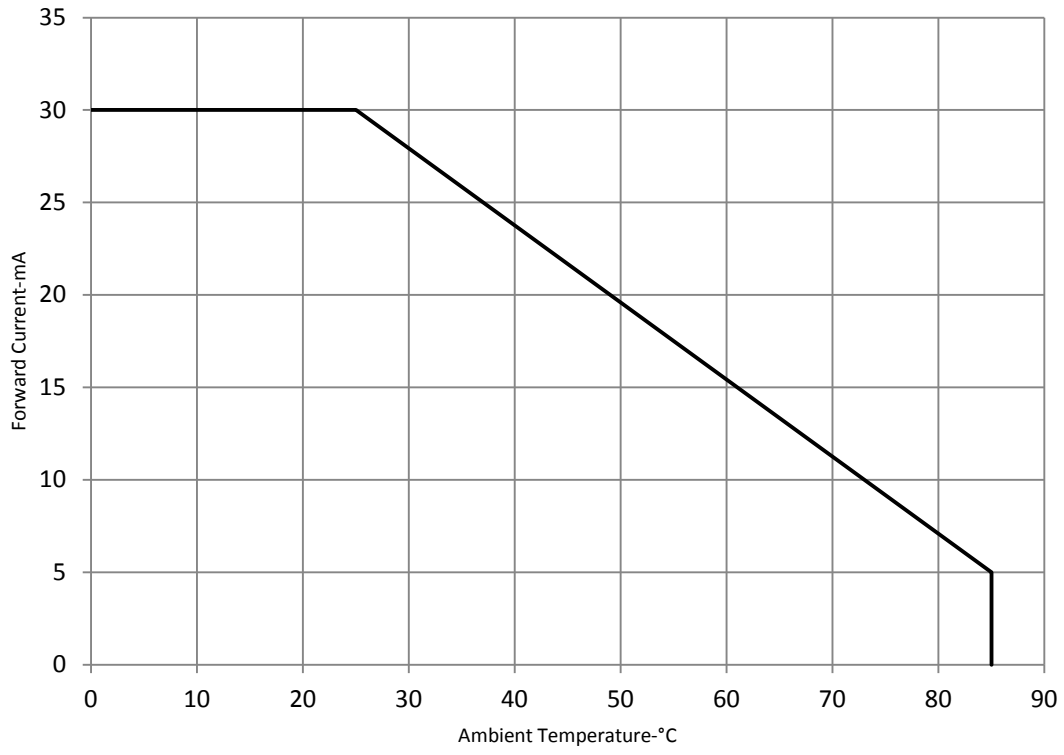
Forward current vs Forward voltage



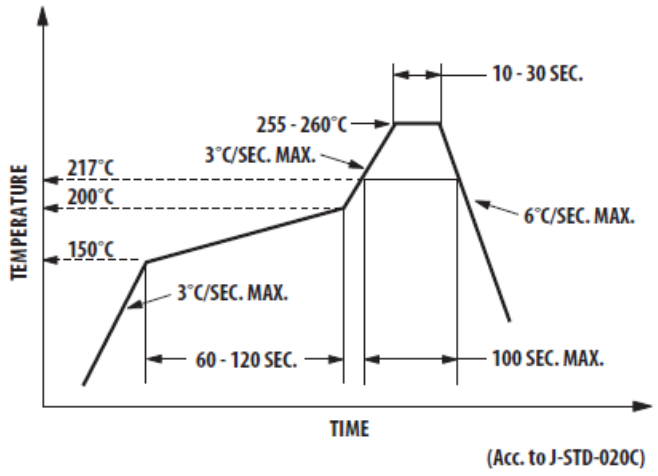
Relative intensity vs Forward current



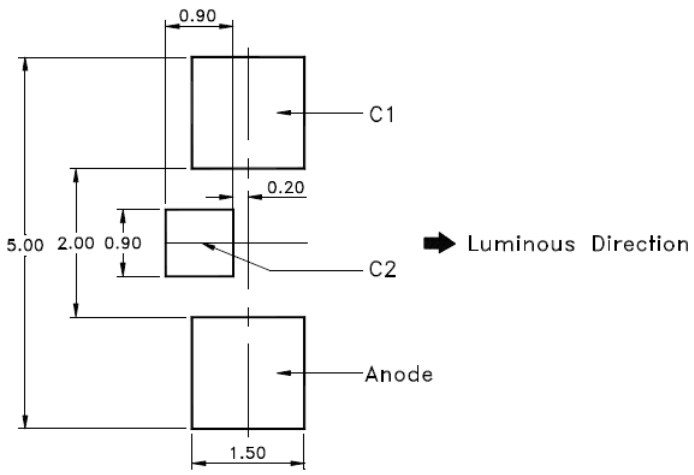
Relative intensity vs Angle



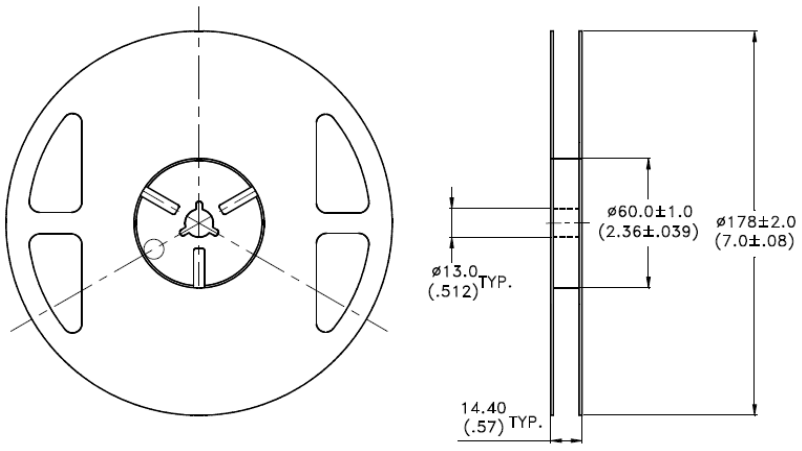
Maximum forward current vs Ambient temperature



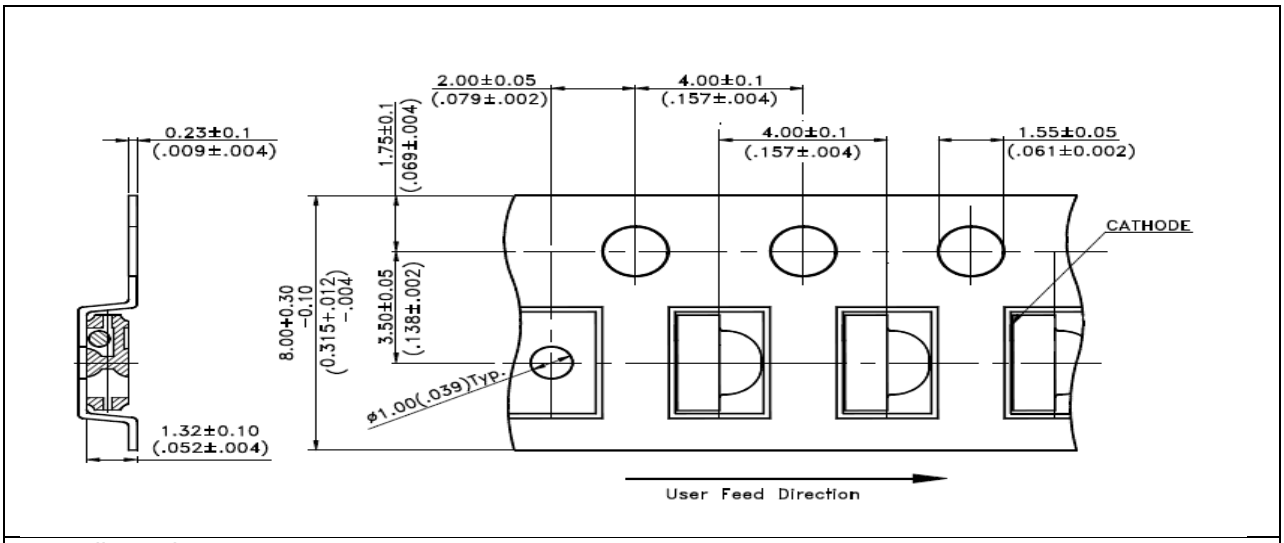
Recommended Pb free reflow solder profile



Recommended soldering pad pattern
Unit:mm



Reel dimensions
Unit:mm



Tape dimensions
Unit:mm(inches)

Storage condition:
5 to 30°C at 60% RH max.
Baking is required before mounting if:

(1) Humidity indicator card is >10% when read at 23±5°C.
(2) Device expose to factory conditions <30°C/60%RH more than 672 hours.

Baking recommended condition: 60±5°C for 20 hours.

Luminous Intensity Bin

Bin	Min (mcd)	Max (mcd)
M	18.0	28.5
N	28.5	45.0
P	45.0	71.5
Q	71.5	112.5
R	112.5	180.0

Tolerance for each bin limit is ±15%

AlInGaP Green Color Bin

Bin	Min (nm)	Max (nm)
A	561.5	564.5
B	564.5	567.5
C	567.5	570.5
D	570.5	573.5
E	573.5	576.5

Tolerance for each bin limit is ± 0.5nm

AlInGaP Amber Color Bin

Bin	Min (nm)	Max (nm)
A	582.0	584.5
B	584.5	587.0
C	587.0	589.5
D	589.5	592.0
E	592.0	594.5
F	594.5	597.0

Tolerance for each bin limit is ± 1nm

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