
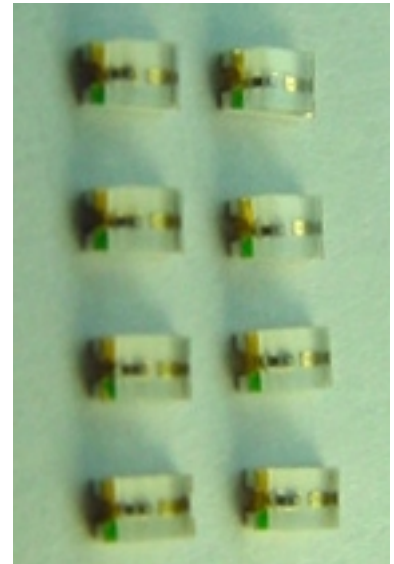


## ◎ SURFACE MOUNT LED LAMPS

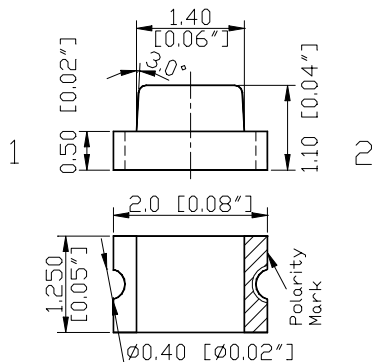
### 表面黏著型發光二極體指示燈

Rev : A    Date : 2001/10/01

GH-S170 Series Electro-Optical Characteristics:									
Code for parts GH-XXXXX	Lighting Color	Material	V <sub>F</sub> (V)		λ (nm)			I <sub>V</sub> (mcd)	Internal Circuit
			typ	max	λ <sub>D</sub>	λ <sub>P</sub>	Δλ	typ	
RSS170TS-ESE	Red	GaAlAs	1.80	2.30	643	660	25	19	
RSS170TS-DPG	Red	AlGaInP	1.90	2.40	631	640	23	52	
OLS170TS-DPG	Orange	AlGaInP	1.90	2.40	624	634	25	67	
OIS170TS-DPG	Orange	AlGaInP	1.90	2.40	615	620	18	75	
AJS170TS-DPG	Amber	AlGaInP	1.90	2.40	605	610	25	52	
ALS170TS-DPG	Amber	AlGaInP	1.90	2.40	595	598	20	75	
YVS170TS-DPE	Yellow	AlGaInP	2.00	2.50	593	594	32	57	
YHS170TS-EPE	Yellow	GaAsP	2.10	2.50	587	586	37	7	
GBS170TS-DPG	Green	AlGaInP	2.10	2.60	578	575	18	37	
GUS170TS-EPE	Green	GaP	2.25	2.70	572	567	32	17	
GPS170TS-EPE	Green	GaP	2.20	2.70	573	567	30	15	
GES170TS-IPG	Green	InGaN	3.20	3.80	527	525	40	120	
GGs170TS-IPG	Green	InGaN	3.30	4.00	509	505	37	120	
BJS170TS-JPH	Blue	InGaN	3.40	4.00	465	460	68	36	
BVS170TS-EPC	Blue	GaN/SiC	4.00	4.50	465	430	60	8	



## ◎ Package Outline Drawing:

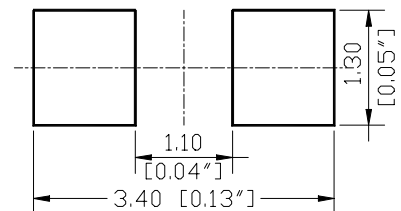


- NOTES:**
1. All dimensions are in millimeters (inches);
  2. Tolerance are  $\pm 0.1\text{mm}$  (0.004inch) unless otherwise noted;
  3. Resin color: water clear.

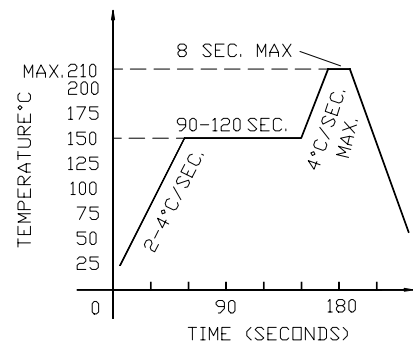
### \* Soldering iron

Basic spec is  $\leq 5\text{sec}$  when  $260^\circ\text{C}$ . If temperature is higher, time should be shorter ( $+10^\circ\text{C} \rightarrow -1\text{sec}$ ). Power dissipation of iron should be smaller than 15W, and temperatures should be controllable. Surface temperature of the device should be under  $230^\circ\text{C}$ .

### \* Recommended Soldering Pattern For Reflow Soldering



### \* Recommended Reflow Soldering Profile.



## ◎ Absolute Maximum Ratings:

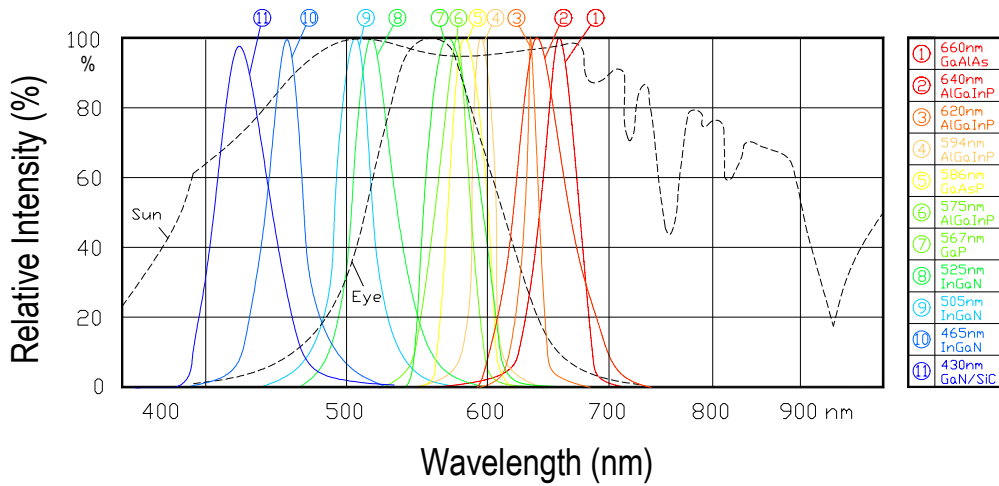
Series	I <sub>F</sub> (mA)	*I <sub>FP</sub> (mA)	V <sub>R</sub> (V)	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)
GH-S170 Series	30	120	5	-20~+80	-20~+100

\*Condition for I<sub>FP</sub> is pulse of 1/10 duty and 0.1msec width

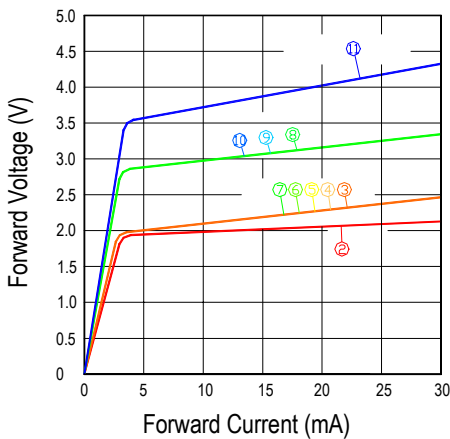
## \* Optical Characteristic Curves Of GH-S170 Series

Rev : A    Date : 2001/10/1

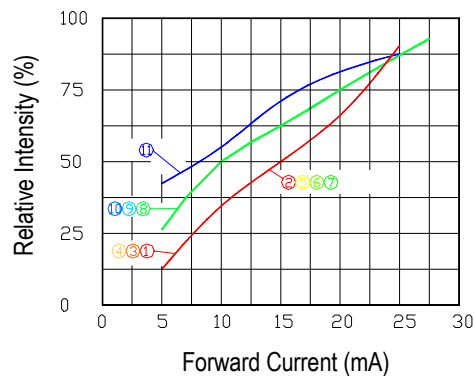
Relative Intensity vs. Wavelength



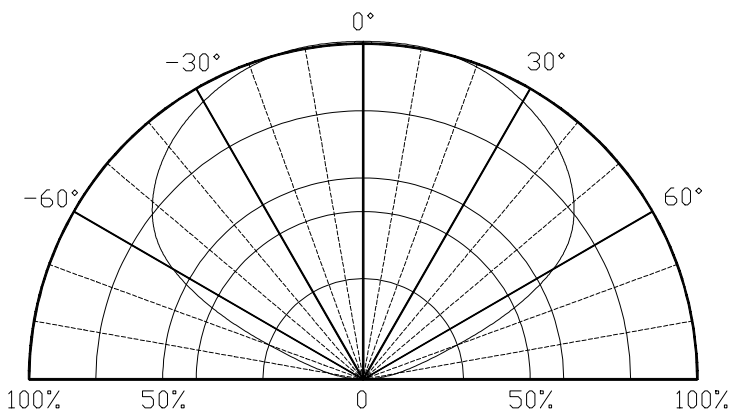
Forward Current vs. Forward Voltage



Relative Intensity vs. Forward Current

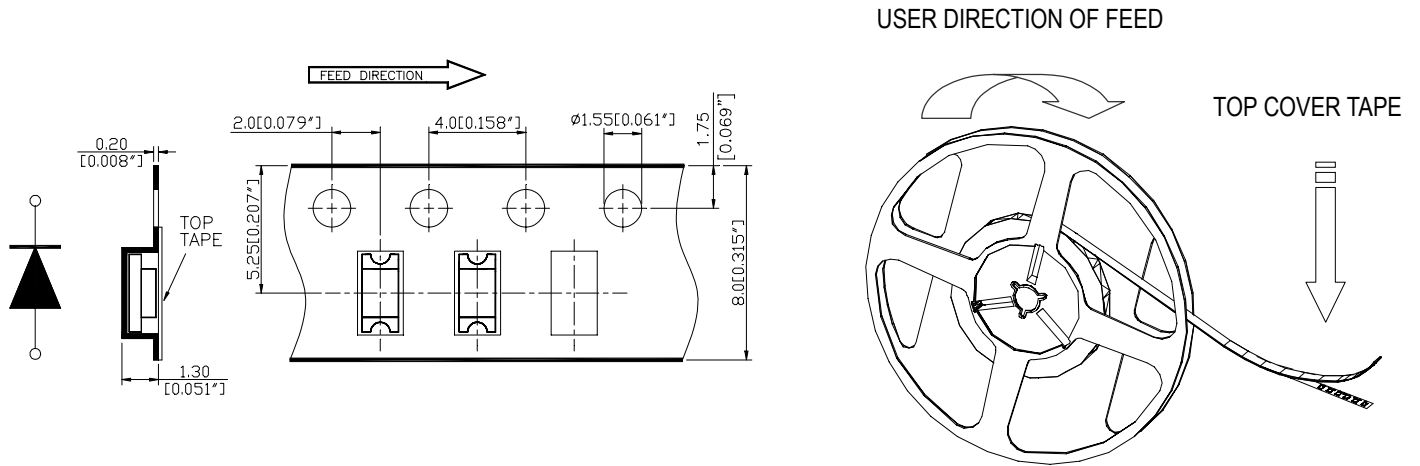


Directive Characteristics

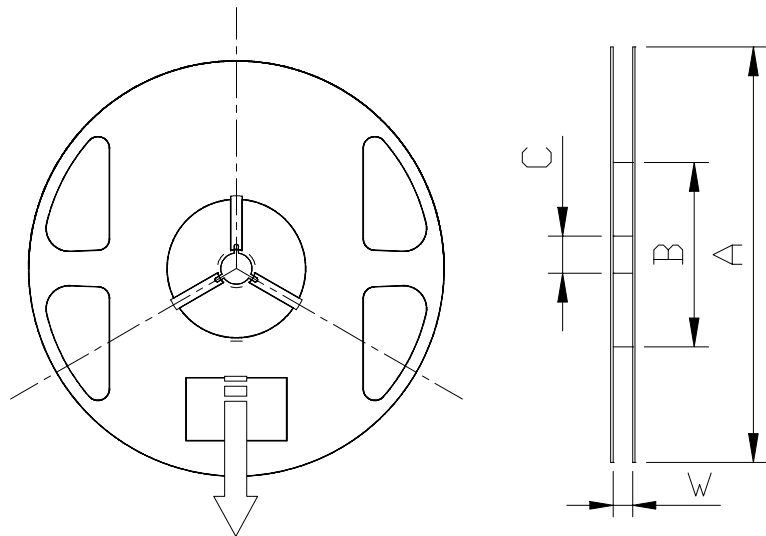



## \*Tape And Reel Of GH-S170 Series

Rev : A	Date : 2001/10/1
---------	------------------



Dimensions per ANSI/EIA Standard RS-481 All dimensions are in millimeters (inches).	
A	180[7.09]
B	60[2.36]
C	13.5[0.53]
W	8.4[0.33]
Thickness of top cover tape 0.1[0.004\"] MAX	



 GRAND HALO ELECTRONIC LTD	
PART NO.	
LOT NO.	
QUANTITY	
DATE	
DATA	

### NOTES:

1. Empty component pockets are sealed with top cover tape;
2. Minimum leader length at both ends of the tape is 450 mm;
3. The maximum number of missing lamps is two;
4. The cathode is oriented towards the tape sprocket hole in accordance with ANSI/EIA RS-481 specifications.
5. 3000pcs/Reel