
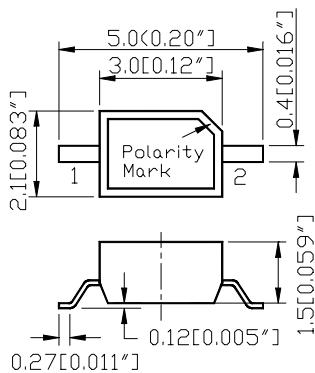


**◎ REFLECTOR COATING TYPE HIGH-PERFORMANCE LEDs**

反射蓋灌注型高效率發光二極體

Rev: A    Date: 2001/11/01

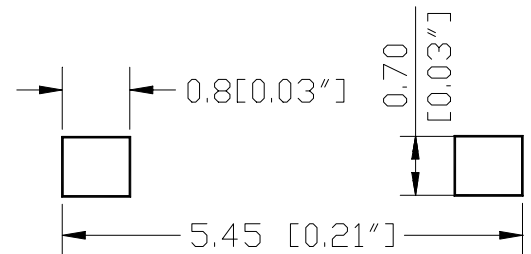
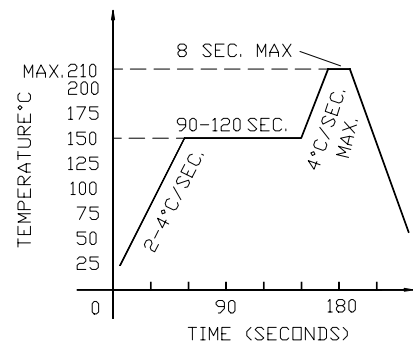
GH-2024 Series Electro-Optical Characteristics:									
Code for parts GH-XXXXX	Lighting Color	Material	V <sub>F</sub> (V)		λ (nm)			I <sub>V</sub> (mcd)	Internal Circuit
			Typ	Max	λ <sub>D</sub>	λ <sub>P</sub>	Δλ	Typ	
RSEB24TZ-WSE	Red	GaAlAs	1.80	2.30	643	660	25	22	
RSDB24TZ-WPG	Red	AlGaInP	1.90	2.40	631	640	23	60	
OLDB24TZ-WPG	Orange	AlGaInP	1.90	2.40	624	635	25	77	
OIDB24TZ-WPG	Orange	AlGaInP	1.90	2.40	615	620	18	86	
AJDB24TZ-WPG	Amber	AlGaInP	1.90	2.40	605	610	25	60	
ALDB24TZ-WPG	Amber	AlGaInP	1.90	2.40	595	600	20	86	
YVDB24TZ-WPE	Yellow	AlGaInP	2.00	2.50	593	595	32	66	
YHEB24TZ-WPE	Yellow	GaAsP	2.10	2.50	587	586	37	11	
GBDB24TZ-WPG	Green	AlGaInP	2.10	2.60	578	575	18	43	
GUEB24TZ-WPE	Green	GaP	2.25	2.70	572	565	32	20	
GPEB24TZ-WPE	Green	GaP	2.20	2.70	573	565	30	17	
GEIB24TZ-WPG	Green	InGaN	3.20	3.80	527	525	40	138	
GGIB24TZ-WPG	Green	InGaN	3.30	4.00	509	505	37	138	
BJJB24TZ-WPH	Blue	GaInN	3.40	4.00	465	460	68	41	
BVEB24TZ-WPC	Blue	GaN/SiC	4.00	4.50	465	430	60	9	


**◎ Package Outline Drawing:**


- NOTES:**
- All dimensions are in millimeters (inches);
  - Tolerances are ±0.2mm (0.008inch) unless otherwise noted;
  - Resin color: water clear.

**\* Soldering iron**

Basic spec is ≤ 5sec when 260°C. If temperature is higher, time should be shorter (+10°C → -1sec). Power dissipation of iron should be smaller than 15W, and temperatures should be controllable. Surface temperature of the device should be under 230°C.

**\* Recommended Soldering Pattern For Reflow Soldering**

**\* Recommended Reflow Soldering Profile.**

**◎ Absolute Maximum Ratings:**

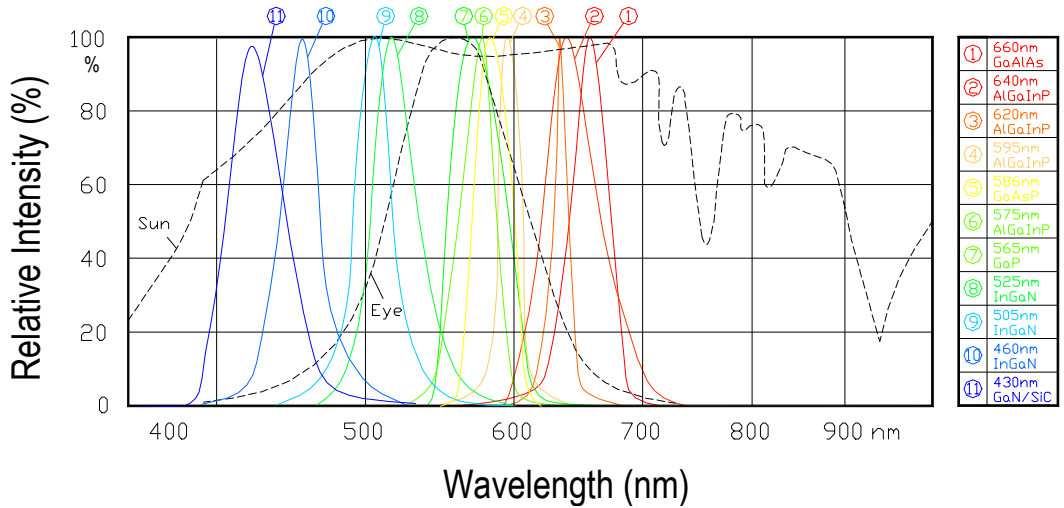
Series	I <sub>F</sub> (mA)	*I <sub>FP</sub> (mA)	V <sub>R</sub> (V)	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)
GH-2024 Series	30	120	5	-20~+80	-20~+100

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

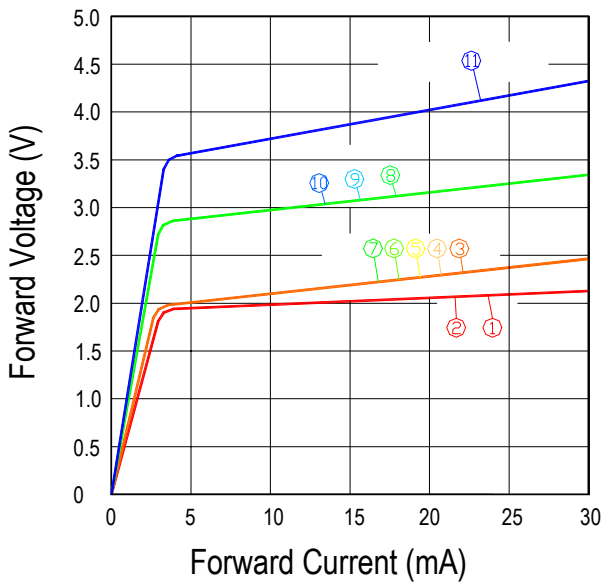
## \* Optical Characteristic Curves Of GH-2024 Series

Rev: A | Date: 2001/11/01

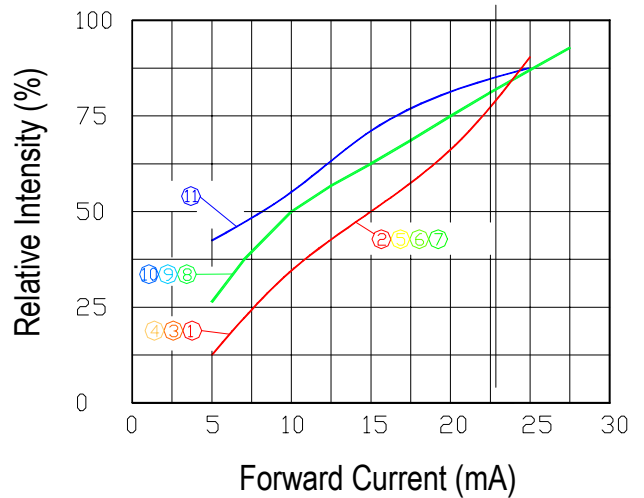
### Relative Intensity vs. Wavelength



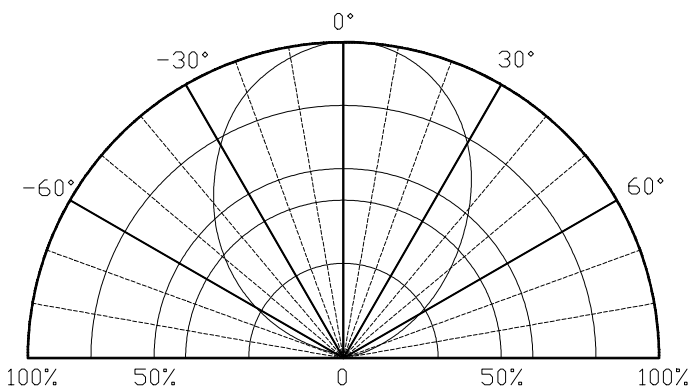
### Forward Voltage vs. Forward Current



### Relative Intensity vs. Forward Current

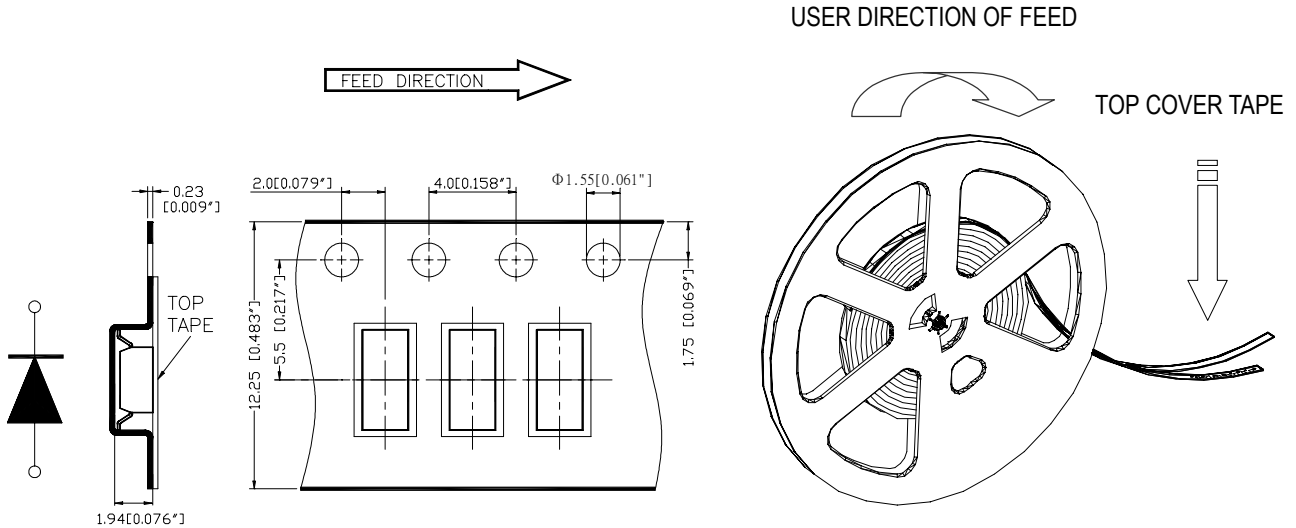


### Directive Characteristics

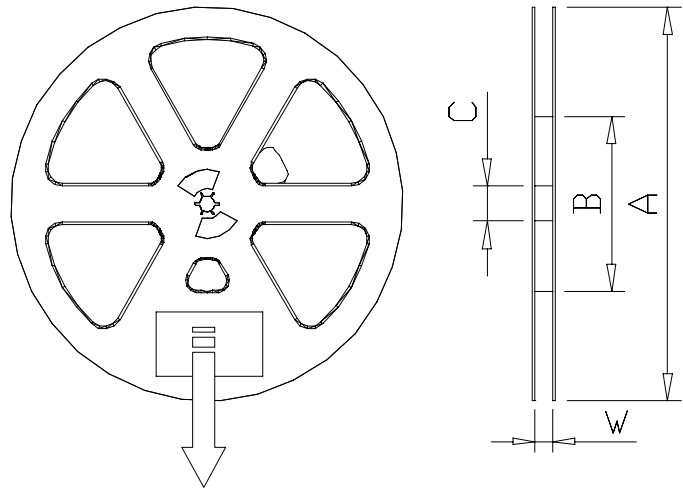



\*Tape And Reel Of GH-2024 Series

Rev: A	Date: 2001/11/01
--------	------------------



Dimensions per ANSI/EIA Standard RS-481 All dimensions are in millimeters (inches).	
A	330[13]
B	100[3.94]
C	13 [0.51]
W	12.5[0.50]
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. 8000pcs/Reel