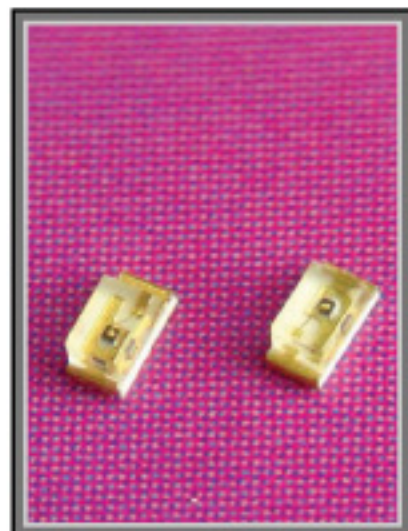


◎ SURFACE MOUNT LED LAMPS

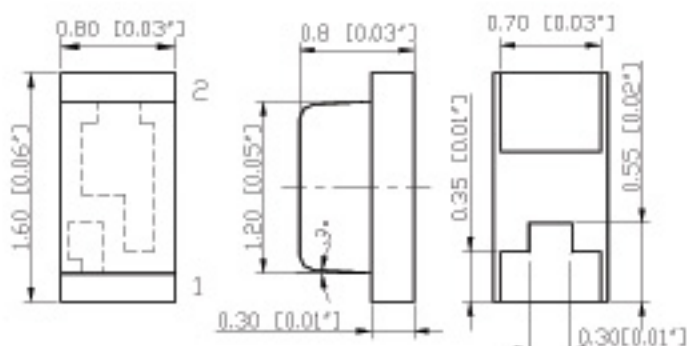
表面黏著型發光二極體指示燈

GH-H190 Series Electro-Optical Characteristics:

Code for parts GH-XXXXX	Lighting Color	Material	V _F (V)		λ (nm)			I _V (mcd)	Internal Circuit
			Typ	Max	λ _D	λ _P	Δλ	Min	
RQH190TS-DPE	Red	AlGaInP	2.0	2.5	630	640	20	80	
OVH190TS-DPE	Orange	AlGaInP	2.2	2.7	624	635	20	80	
YUH190TS-DPE	Yellow	AlGaInP	2.0	2.5	580	585	20	80	
GBH190TS-DPJ	Green	AlGaInP	2.0	2.5	574	575	20	25	
G3H190TS-JPH	Green	GaInN	3.3	3.8	525	520	30	160	
BLH190TS-JPH	Blue	GaInN	3.50	4.00	465	460	30	40	
W4H190TS-JPH	White	GaInN	3.50	4.00	X=0.22~0.38 Y=0.22~0.36			100	

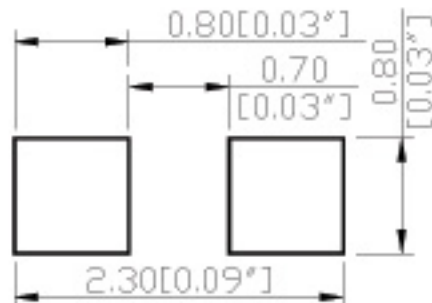


◎ Package Outline Drawing:

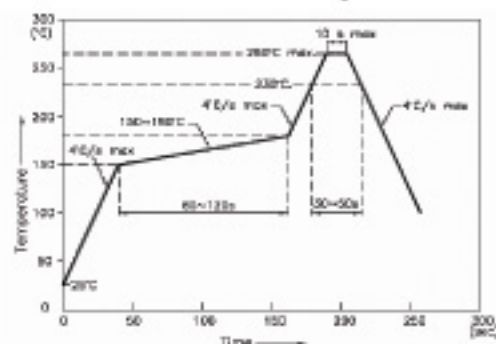


NOTES: 1. All dimensions are in millimeters (inches);
 2. Tolerances are ± 0.1 mm (0.004inch) unless otherwise noted;
 3. Resin color: water clear.

● Recommended Soldering Pattern For Reflow Soldering



● Recommended Reflow Soldering Profile.



● Soldering iron

Basic spec is ≤ 5 sec when 260°C. If temperature is higher, time should be shorter (+10°C $\rightarrow$ -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.

◎ Absolute Maximum Ratings:

Series	I _F (mA)	*I _{FP} (mA)	V _R (V)	T _{OP} (°C)	T _{ST} (°C)
GH-H190 Series	30	120	5	-40~+80	-40~+85

● Condition for I_{FP} is pulse of 1/10 duty and 0.1msec width