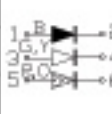
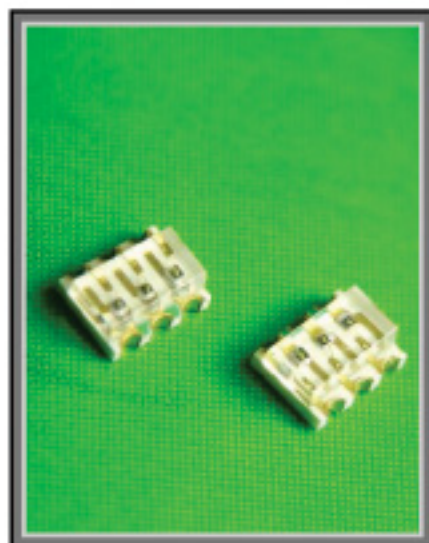


◎ SURFACE MOUNT LED LAMPS

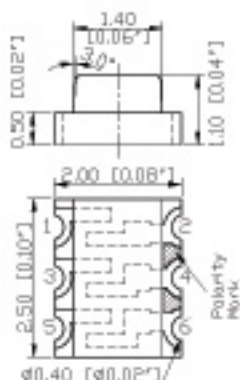
表面黏著型發光二極體指示燈

GH-S178 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	
WPS158TS-E7E	Red	AlGaInP	2.00	2.50	630	640	20	80	
	Yellow	AlGaInP	2.00	2.50	590	595	20	80	
	Blue	GaInN	3.50	4.00	465	460	30	40	
WPS178TS-E5H	Red	AlGaInP	2.00	2.50	630	640	20	80	
	Green	GaInN	3.30	3.80	525	520	30	160	
	Blue	GaInN	3.50	4.00	465	460	30	40	
WPS178TS-E6H	Orange	AlGaInP	2.20	2.70	624	635	20	80	
	Green	GaInN	3.30	3.80	525	520	30	160	
	Blue	GaInN	3.50	4.00	465	460	30	40	



◎ Package Outline Drawing:

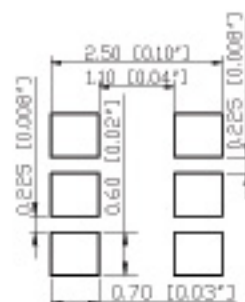


- NOTES: 1. All dimensions are in millimeters (inches);
2. Tolerances are ±0.1mm (0.004inch) unless otherwise noted;
3. Resin color: water clear.

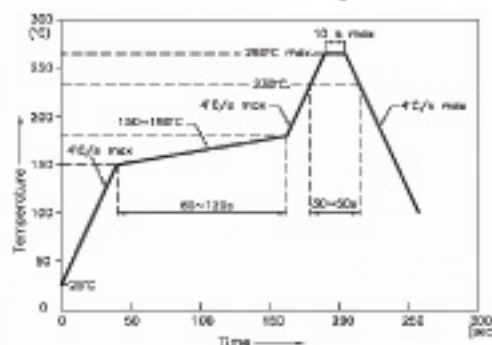
★ Soldering iron

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 _F (mA)	*I _{FP} (mA)	V _R (V)	T _{OP} (°C)	T _{ST} (°C)
GH-S178 Series	30	120	5	-40~+80	-40~+85

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