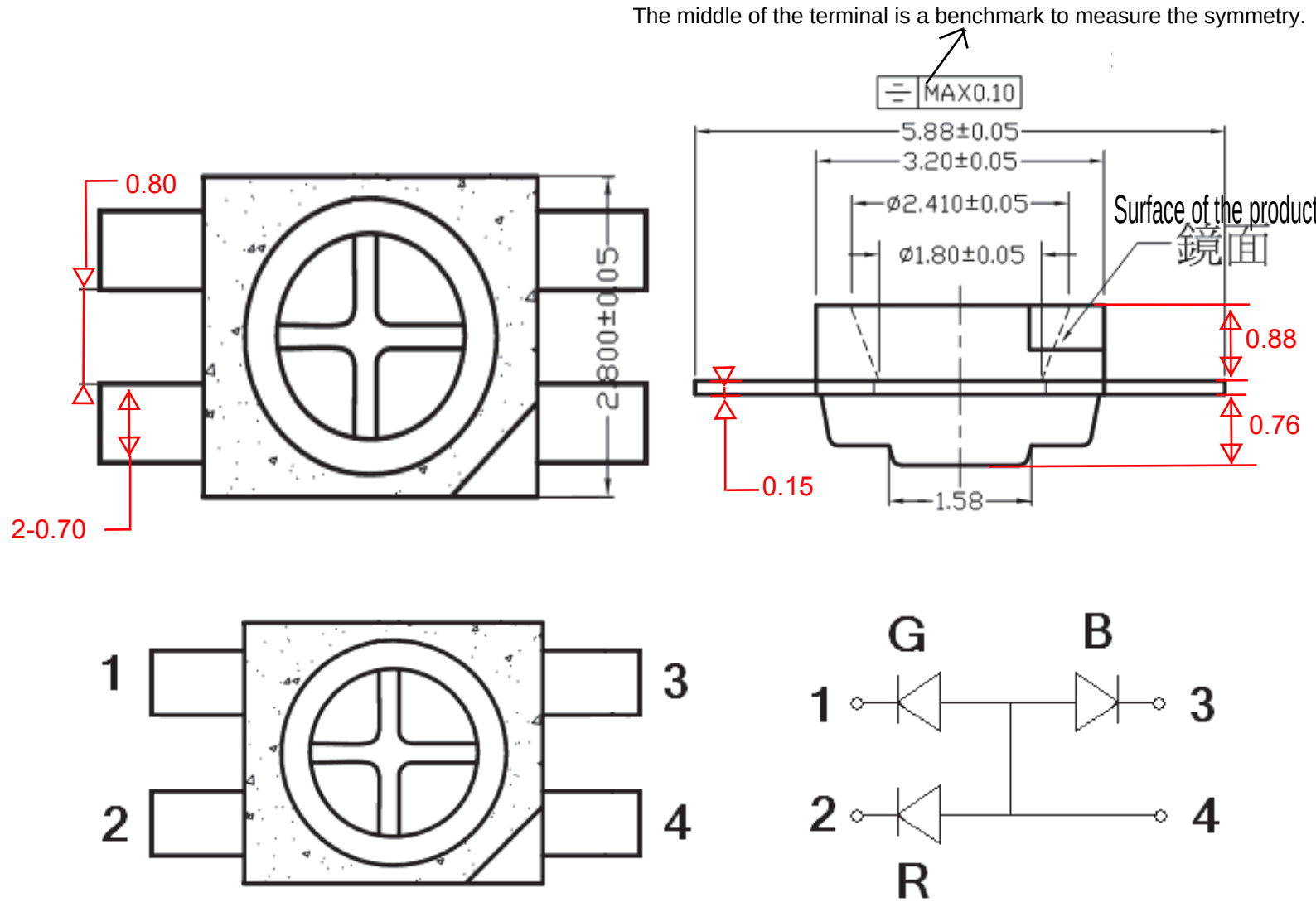
KAILH-PG1280-SMT-LED

Outline Drawing 外型图：



Note:

- Super High brightness of surface mount LED
- Sorting for Iv and Vf@20mA of if
- Compatible to IR reflow soldering.
- The tolerances unless mentioned is ±0.2mm, Unit = mm

KAILH-PG1280-SMT-LED

■ Absolute Maximum Rating 极限工作参数

Item 项目	Symbol 代号	Absolute Maximum Rating 极限工作参数	Unit 单位
Forward Current 正向电流	IF	20	mA
Peak Forward Current 瞬间脉冲电流	IFP	50	mA
ReverseVoltage 反向电压	VR	5	V
Electrostatic discharge 静电释放	ESD	1000	V
Operating Temperature 工作温度范围	TOPR	-35～+85	℃
Storage Temperature 存放温度范围	TSTG	-40～+90	℃
Soldering Temperature 最高焊接温度	TSOL	Reflow Soldering: 220℃ for 5 sec Hand Soldering: 260℃ for 3 sec	

■ Electro-Optical Characteristics (Ta=25℃)光电特性参数

Item 项目	Symbol 代号	Condition 测试条件		Min 最小值	Typ 典型值	Max 最大值	Unit 单位
Forward Voltage 正向电压	VF	IF=20mA	R	1.8	2.1	2.4	V
			G	2.7	3.0	3.3	
			B	2.8	3.1	3.4	
Light intensity 光强度	IV	IF=20mA	R	400	450	500	mcd
			G	900	950	1000	
			B	300	350	400	
Wavelength 波长	WD	IF=20mA	R	620	623	625	nm
			G	517	519	522	
			B	465	467	468	
Luminous Flux 光通量	Φ	IF=20mA	R	1.8	2.0	2.2	lm
			G	5.7	6.0	6.3	
			B	1.4	1.6	1.8	
Reverse current 逆向电流	IR	IF=20mA				5	uA
Viewing Angle 半光全角	2θ1/2	IF=20mA				120	deg
Recommend Forward Current 持续正向电流	IF(rec)	IF=20mA				20	mA

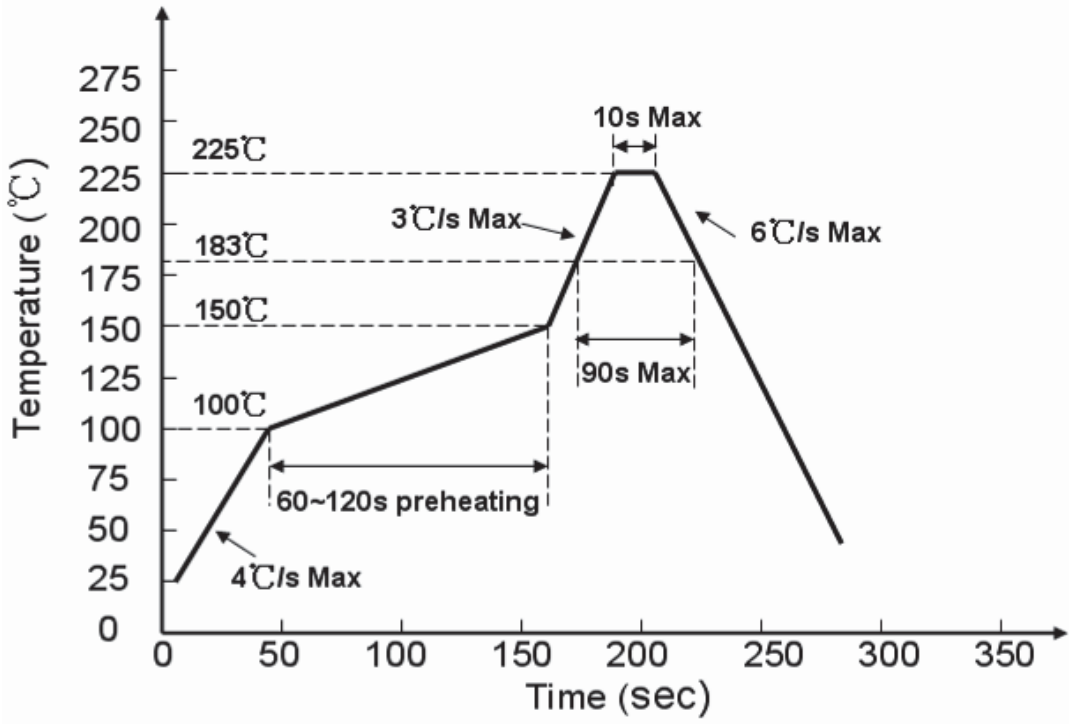
Notes:

1.Work absolute ratings Ta=25℃ 工作常规值 温度=25℃

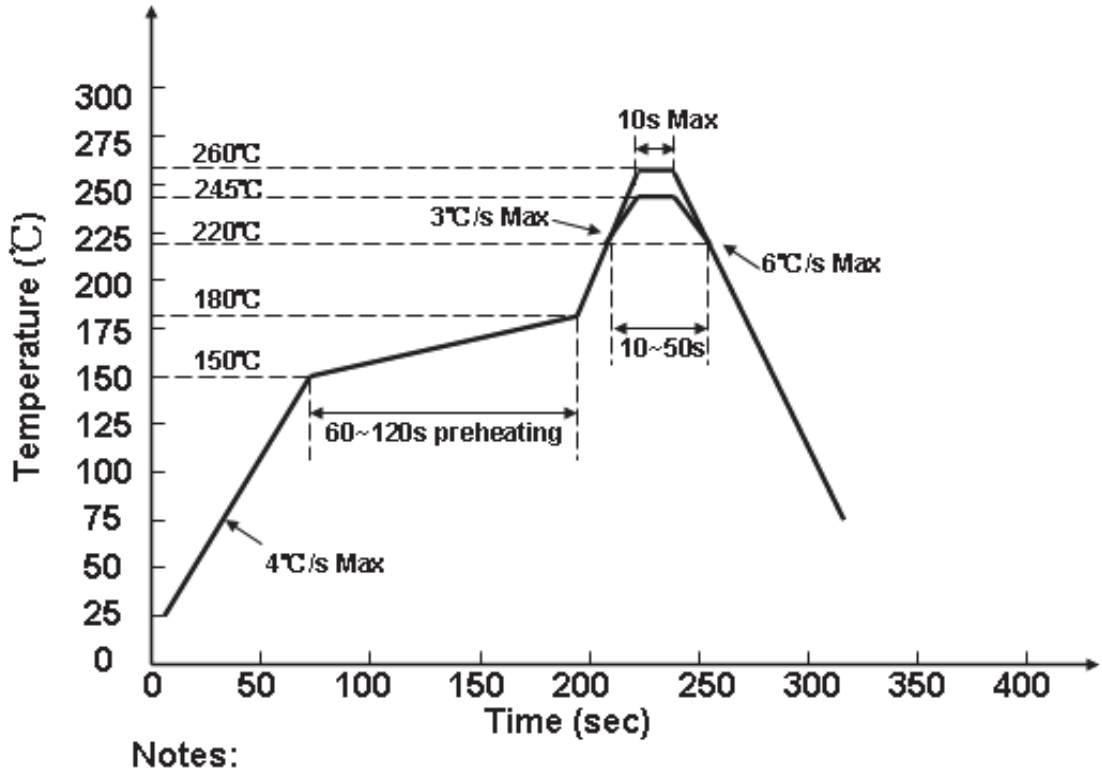
2.Tolerance of measurement of forward voltage±0.1V 正向电压误差范围±0.1V

■ Soldering Profile Suggested

1、For Lead Solder



2、For Lead Free Solder



Notes:

We recommend the soldering temperature 245± 5℃ ;

The maximum temperature should be limited to 260 ℃.

NOTE:
Number of reflow process shall be less than 2 times and cooling process to normal temperature is
required between first and second soldering process.回流焊接应该少于 2 次, 在第一和第二次焊接之间要求有冷却至常温的过程.

一、PRECAUTONS IN USE LED/使用 LED 注意事项;

LED Soldering condition/ LED 焊接条件;

1：烙铁焊接：烙铁最高 30W 尖端温度不超过 300℃；焊接时不超过 3 秒;

Manual soldering：iron Maximum 30W, iron bit temperature can not over 300 degree; soldering time should not be more than 3 seconds;

Cleanout/清洗;

当用化学品清洗 LED 胶体时须特别小心，因为有些化学品对胶体表面有损伤并引起褪色如三氯乙烯、丙酮，可用乙醇擦拭浸渍，时间在常温下不超过 2 分钟。

Utmost care must be taken when using chemical to clean LED, Some chemical can damage the surfaceof epoxy and will cause colour fading, such as trichloroethylene, acetone etc ethanol can be used to wipe and dip under normal temperature, but the time should not be more than 2 minutes。

ESD Protecction/静电防护;

静电和电流的急剧升高会对 LED 产生损伤，LED 系列产品使用时请使用防静电装置，如防静电带和手套。

Excessive ESD and current could damage the LED, protection equipment such bands when operate LED Product。

注意：使用时人体放电模式 HBM<1000V；机器放电模式 HBM<100V。

Attention：Human Boby discharge Mode HBM<1000V；Machine discharge Mode MM<100V

Reliability Test/可靠性试验;

我公司的 LED 产品不仅要经过生产线的自动分档测试仪检测、分档，而且要经过严格的可靠性试验，这些试验标准都是采用业内公认的 MIL-STD-。

Our LED chips are classified by machine in production line; and strictly perfromed the reliability test according to world wide standard MIL-STD-.