

LED
High Power LED Acknowledgment
1W
Model of product:1W Green

客户名称(Name):

客户品号(Article

No.): 产品型号(Model

No.): 送样日期(Date

Landed):

厂商 Manufacturer		客户确认 (品质部) Customer Confirmation(Quality Dep.)		客户确认 (技术部) Customer Confirmation (Technology Dep.)	
制作: Drafter	戴晓东 Dai Xiao Dong	<input type="checkbox"/> 接受(accept)		<input type="checkbox"/> 接受(accept)	
		<input type="checkbox"/> 不接受(Reject)		<input type="checkbox"/> 不接受(Reject)	
审核: Checked	黄文平 Huang Wen Ping	审核: Checked		审核: Checked	
核准: Approved	姚斌 Yao Bing	核准: Approved		核准: Approved	

此规格书需双方盖公司公章确认。

This specification shall come into effect upon signatures by both parties.

1. 应用 Application

(1W epiled 30绿光)

This specification applies only to models of high power led (1W epiled 30mil Green) LED .

1.1 特点 Feature

●外观尺寸: 14.5mm×8.0mm×5.1mm

Package Dimensions:14.5mm×8.0mm×5.1mm

●发光角度: 140°

Beam Angle:140°

●符合ROHS标准

RoHS Approved

●常规PC透镜适合手工焊接

Normal PC lens is suitable for manual welding

●高温透镜适合回流焊焊接

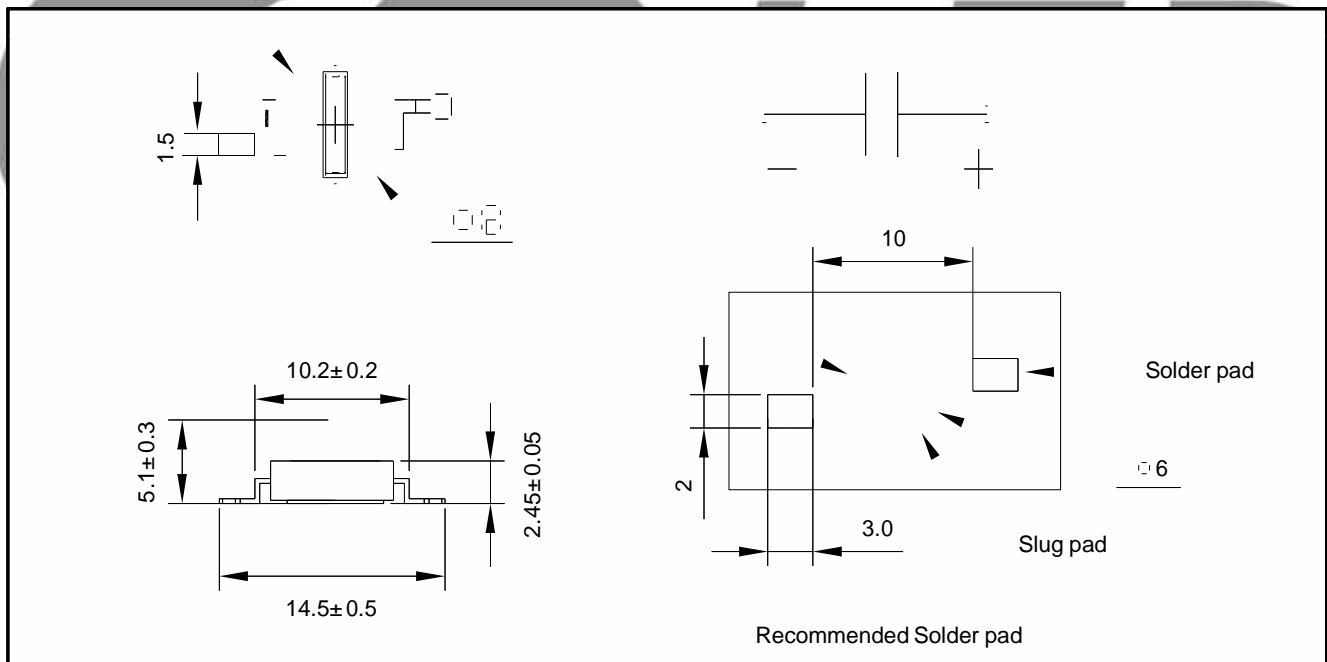
High-temperature lens is suitable for reflow soldering

1.2主要用途: 照明

Main application: Lighting

2. 外部尺寸和等效电路

Demension and Circuit



单位: mm
Unit:mm

所有未标注公差为: +-0.2mm
Tolerance:+-0.2mm

导热柱材质: 铜
Conduction support material:copper

3. 级别和特性Characteristics:

3-1. 绝对最大等级 Absolute Maximum Ratings

项目	符号	值	单位
Item	Symbol	Value	Unit
极限功率 *1	P	1.2	W
Max power			
正向直流电流*1	IF	350	mA
DC Forward Current			
反向直流电压*2	V _R	-5	V
Reverse Current			
结温	T _j	115	°C
Junction Temperature			
工作温度*3	T _{OPR}	-30~+60	°C
Operating temperature			
储藏温度	T _{STG}	-35~+100	°C
Storage Temperature			
静电承受极限	ESD	2000	V
Electrostatic Limit			
引线焊接温度		350°C/3-5S	
Soldering Temperature			

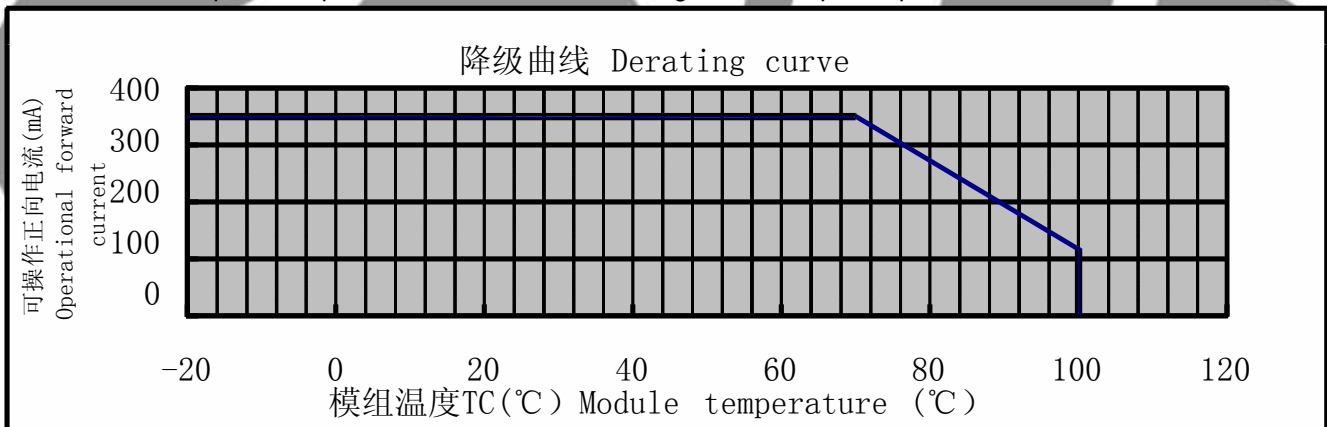
补充说明 Additional Remarks

- 1.极限功率和正向电流 是指灯珠温度通过使用合适的散热体下的最大设置数值。
1.Max power and positive current mean the maximum setting value of the bottom temperature of led light source by using the appropriate heat sink.
- 2.最初连接错误的反向电压，超出将可能损坏灯珠。
2.Originally connection error and off-limits voltage may damage LED chip.
- 3.不一样的温度 (温度测试点)表示灯珠要按照降级曲线进行对应数据操作。
3.Different temperatures, corresponding temperature test point on the next, said LED light should operate follow derating curve on the text.

3-2. 降级曲线 Derating curve:

注：为了保持温度低于额定，需要确保散热器有足够的散热性能(350mA*3)。

Note : In order to keep the temperature below the rated ,enough heat dissipation performance is needed.

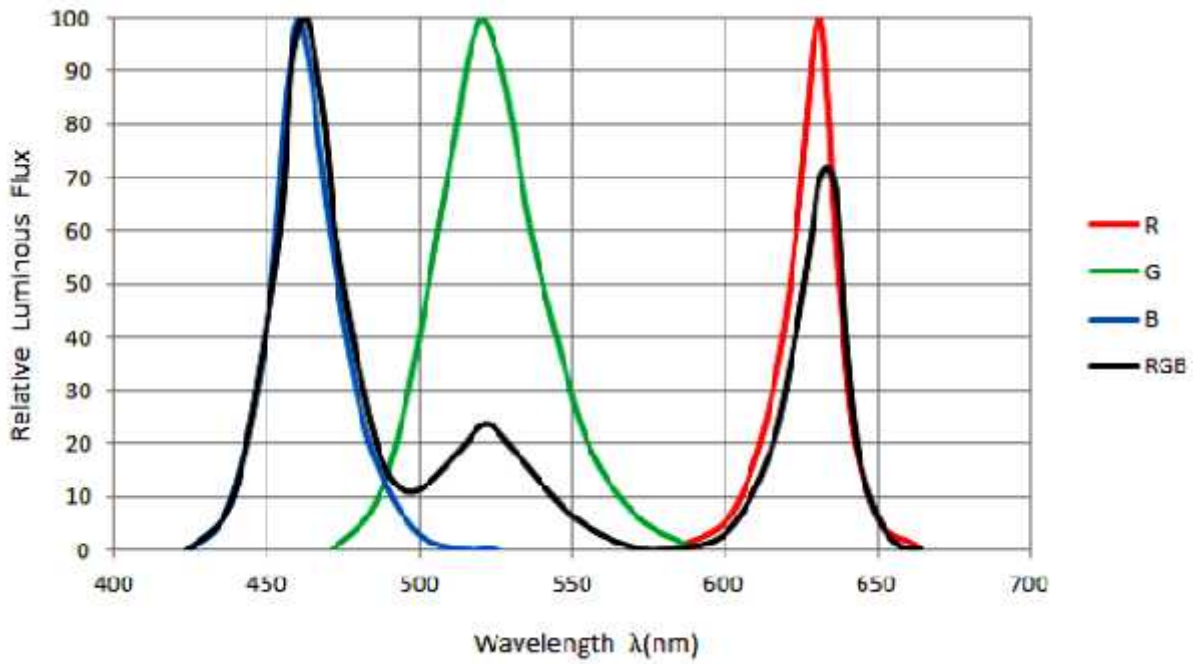


3-3. 光电特征: Optical Characteristics:

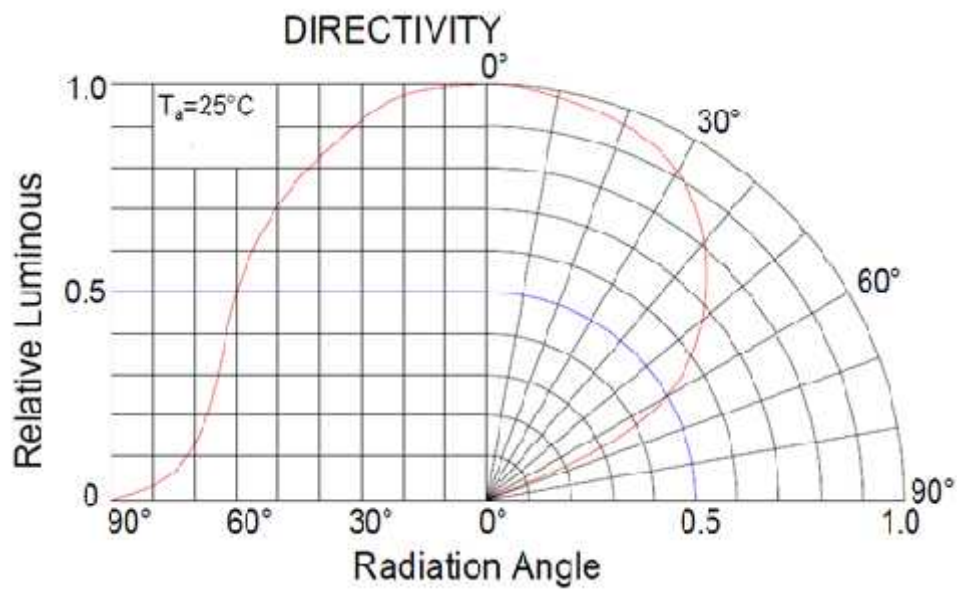
参数Parameter	符号Symbol	条件 Condition	颜色color	Min.	Typ.	Max.	LM/W	单位 Unit	
正向电压	VF	IF=350mA /Tc=25 °C	R	-	-	-	/	V	
			G	3.0	3.2	3.4			
			B	-	-	-			
主波长 Domi Wavelength	d(R)	IF=350mA /Tc=25 °C	R	-	-	-	/	nm	
	d(G)		G	520.0	525.0	530.0			
	d(B)		B	-	-	-			
光通量 Luminous flux	v		G30	R	-	-	-	Lm (LM/W)	
			G38	R	-	-	-		
			G42	R	-	-	-		
			CY30	G	80.0	-	90.0		>80
				G	-	-	-		-
				G	-	-	-		-
			G35	B	-	-	-		-
			G40	B	-	-	-		-
G45	B	-	-	-	-				

3-4.特性图表Characteristics Diagram

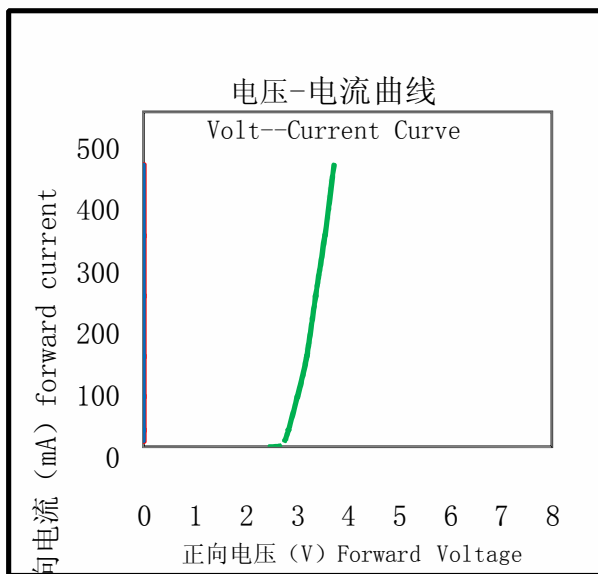
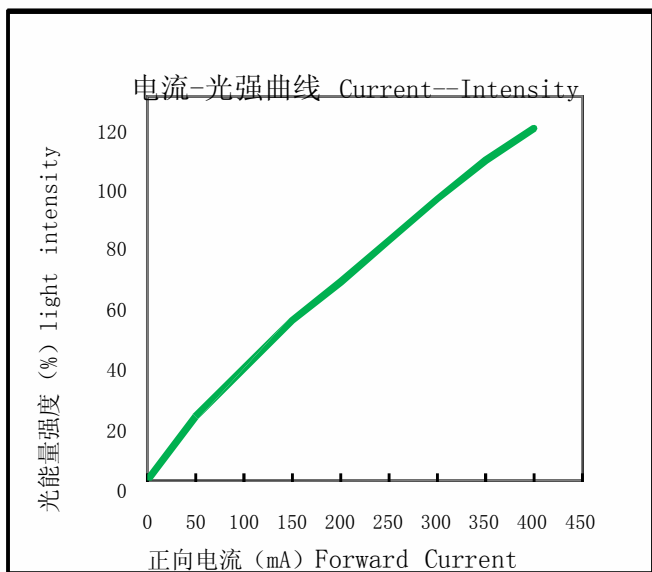
3-4.1相对光谱分布曲线图: Relative Spectral Distribution Graph:



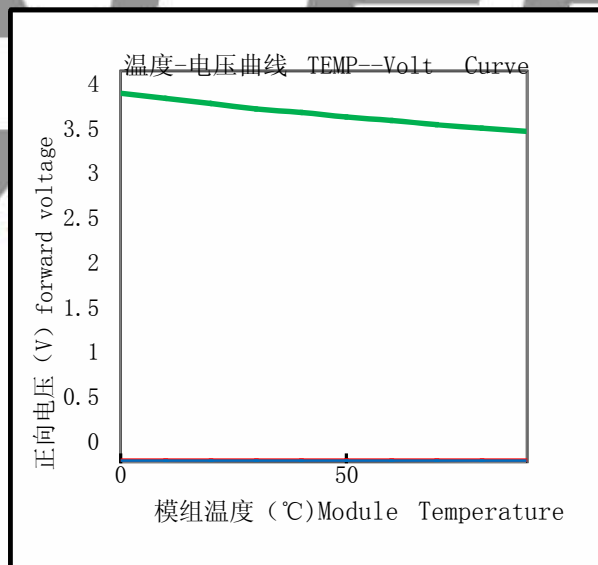
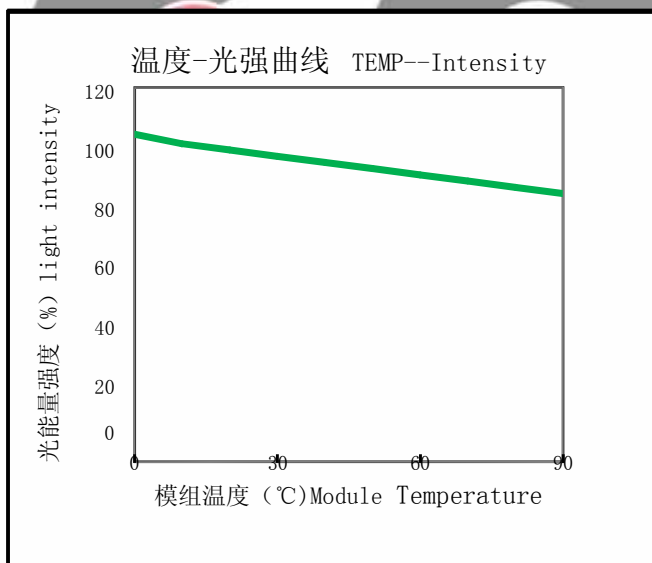
3-4.2光通量分布图 Luminous Flux Distribution



3-4.3其他相关曲线图Other optical Curves



正



注：此页所表述之特性数据仅供参考(非保证数据)
 Attention: The characteristics of data described by this page are for reference only (Unassured Data)

4. 可靠性 Reliability

产品可靠性将满足下列项目 Reliability will meet the following items

4-1. 测试项目和测试条件 Testing items and testing conditions

序号 Serial No.	试验项目 Test Item	试验条件Test condition	样品数量 Sample Quantity	失效数量 Failure Quantity
1	高低温冲击 Thermal shock	-40°C(15min)-----+100°C(15min),100cycles	22	0
2	高温存放 HighTemperature	+85°C, 1000h	22	0
3	低温存放 Low Temperature	-40°C, 1000h	22	0
4	高温高湿存放Humidity Heat Storage	T=+85°C,RH>=85%,1000h	22	0
5	高温操作 High-temperature	T=+85°C, IF=350mA1000h	22	0
6	低温操作 Low temperature	T=-40°C, IF=350m 1000h	22	0

5.包装规格 Packing Standard

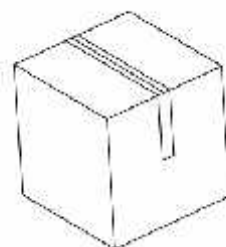
5.1标签 Label



5.2包装 packaging

产品按照规定方向放置在吸塑盒凹槽里,上面盖上透明的防护塑料盖子,避免产品胶面受外力挤压。每盘吸塑盒放置的数量根据客户要求分为1-50PCS不等(吸塑盒外观标准尺寸为146.0*148.5*9.5mm),如图所示,包装好的材料放置在纸箱中用透明胶带封好。

The product is packed in fluted plastic box with protection cover, preventing from outside force.1-50pcs in one plastic box according to different requirements from customers(Outside demension of the plastice box is 146.0*148.5*9.5mm). Packed plastic box will be stored in carton and sealed,which is showed as the picture.



6.使用注意事项 Caution

6.1 Storage condition: Before opening: the temperature is 5 ~ 30 °C, relative humidity less than 60%. (After opening the led light source should be used within 15 days.)For Unused Product,Please dehumidification vacuum sealed.Dehumidifying conditions: 60 °C ± 5 °C, 24H. Effective use of the product sealed for one year

6.2组装注意事项: Attention:

(1) 常规PC透镜灯珠用导热膏(导热系数1.0-4.0MK/W左右)与散热体连接,灯珠两个引脚用恒温电烙铁焊接,焊接引线温度控制在350°C,时间3-5S内;组装过程中避免外力作用于胶体表面(如压力,摩擦或锋利金属钉等),以免造成金线变形或断线等异常,常温PC透镜不耐高温,不适合回流焊接。

(1)thermal paster(Thermal Conductivity 1.0-4.0MK/W) should be used when connect the high power led with normal PC lens to the radiator; two pins of leds shall be welded by thermostat soldering iron. Make sure that the welding temperature is under 350 °C and welding time in 3-5 Seconds; Assembly process to avoid external force on the colloid surface (such as pressure, friction or sharp metal nails, etc.), to avoid gold wire deformation or breakage and other abnormalities.Normal PC lens can't withstand high temperature , reflow soldering is not suitable for normal PC lens .

(2) 高温透镜灯珠可过回流焊,高温透镜可承受200°C/5S,使用低温锡膏,严格按照回流焊操作标准焊接,具体操作参考产品使用注意事项。

High temperature LED lens is suitable for reflow soldering , and high-temperature lens can withstand 200°C/5S , using low temperature solder paste ,in strict accordance with the reflow soldering welding operating standards .Specific operating refers to product use notes .

(3) Product normal operating temperature: TS point (negative pad) is less than 65 degrees, the radiator temperature less than 200 degrees, if exceeded our requirements for a given customer must make reliability assessment, resulting loss must be borne by the customer.

(4) Power Supply Select: This product is to be driven using a constant current source, and the output current of the power range meets the specifications of the book, for the use of a constant voltage source or other conditions, please do used result of risk assessment

(5)SD protection is needed.

5.3其他注意事项: Other Instructions:

(1) If you use the product in any of the following conditions, please make sure its normal performance and reliability.*Place where is moist or has dew、cream、salt air、corrosive gases(C1, H2S, NH3, SO2, NOX, etc.)

(2) LED colloid surface dirt, use alcohol to clean.Can't use acetone caustic cleaning solvent to cleaning

7.使用兼容性 Using Compatibility

7-1.The chemical composition of gas in lamps and surrounding environment of light source are essential to the life of the lamps, especially when you choose to use chemical composition, it is particularly important in lighting design. Before considering the use of any material, be sure to consult the product supplier or LED manufacturer. The more information obtained before using some material, the higher the performance of the lamp.

7-2.Many regular chemicals will release gaseous aromatic compounds (ie, aromatics), and even small amounts of these chemicals, the gases which they released also tend to cause Led discoloration or damage. The chemicals in test report Table 1 will cause damage of LED. Therefore, it is not recommended to use these chemicals in a solid state lighting system of Led or anywhere around the LED .

已知具有LeD相容性问题的常见化学品 Common chemicals with LED compatibility issues

可除去烃类气体的化学品(如甲苯、苯、二甲苯) removing hydrocarbon gas (such as toluene, benzene, xylene)	Chemicals
乙酸甲酯或乙酸乙酯(例如卸甲油) acetate (such as resurrection oil)	Methyl acetate or ethyl
氰基丙烯酸盐(例如“强力胶”) Cyanoacrylate (such as "glue")	
乙二醇醚和二丙二醇单甲醚(例如电子设备清洁剂) Ethylene glycol ether and dipropylene glycol monomethyl ether (such as electronic equipment cleaner)	
甲醛或丁二烯(例如pLloBoND®粘合剂) Formaldehyde or butadiene (such as pLloBoND® adhesive)	
氯, 包括含漂白剂的清洁剂和喷雾剂 Chlorine, including detergent and sprays with bleach	

5-4.

The following sheet is the list of common basic materials and commercial products in electronics and electrical equipment. Some of those materials can cause serious damage or light color shift phenomenon. The results of a risk assessment related materials are as shown in the sheet:

Material Name	Type	Using for LED	Outgassing Test	Prohibit Using	To Be Verified
Acetic acid	Acid			yes	
Acetone	Manufacturing materials		yes		
Acrylonitrile-butadiene-styrene (aBS)	Rubber / plastic sealant	yes			
Ammonia	alkali				yes
Benzene	Solvent				yes
Butadiene rubber	Rubber / plastic sealant				yes
Butyl rubber	Rubber / plastic sealant				yes
polyvinyl chloride	Rubber / plastic sealant				yes
Chlorobutyl	Rubber / plastic sealant				yes
Chlorosulfonation rubber	Rubber / plastic sealant				yes
Cyanoacrylate	Sealants and adhesives		yes	yes	
DCa SCC3	Paint / Glue	yes	yes		
Dichloromethane	Solvent				yes
Propylene oxide	Rubber / plastic sealant				yes
Gasoline	Solvent				yes
graphite washer	Thermal grease	yes	yes		
Halogenated hydrocarbons (including			yes		yes
HT902	Paint / Glue	yes	yes		
Hydrochloric acid	Acid				yes
Isopropanol (Ipa)	cleanser	yes	yes		
meK (methyl ethyl ketone)	Solvent				yes
mIBK (methyl isobutyl ketone)	Solvent				yes
Mineral oil	Solvent				yes
nitric acid	Acid				yes
Non-silicone thermal grease	Thermal grease	yes	yes		yes
Petroleum	Oil / Lubricants				
Polycarbonate (pC)	Structural plastic	yes			
Polyethylene	Rubber / plastic sealant	yes			
Polypropylene (pp)	Structural plastic	yes			
Polystyrene (GppS)	Structural plastic	yes			
Potassium hydroxide	alkali				yes
silicone oil	Oil / Lubricants				yes
sodium hydroxide	alkali				yes
Sulfuric acid	Acid				yes
Tetrachloromethane	Solvent				yes
tetradecylamine					yes
Heat transmission grease(silicon)	Thermal grease	yes	yes		
Tropical pass (with or without	Thermal grease	yes	yes		
Toluene	Solvent				yes
Trimethyl hexamethylene diamine					yes
Xylene	Solvent				yes