Probimer®

PCB Industry Product Selector Guide

Photoimageable Solder Mask

PROBIMER® 88

General Description

Probimer® 88 exhibits a semi-matt surface and have high temperature resistance for automotive pcb with thermal class 140°C and 160°C requirements.

Application

- Automotive
- Highly thermal resistant

Advantage

- Halogen free, meet JPCA standard
- High resolution
- Wide Process Window
- Outstanding performance in post solder mask process

Product Properties *

Application Method	Screen Printing TC 150°C	Curtain Coating TC 150°C	Screen Printing TC 160°C		
Product Name **	92101/99001	PR88 CC	92102 / 99002		
Color	Green	Green	Green		
Gloss	Semi-Matt	Semi-Matt	Semi-Matt		
/iscosity	150-250dpa.s	50-150dpa.s	200-300dpa.s		
I.V (wt%) (Mixture)	74-78	68-72	74-78		
Shelf Life	9 months	9 months	6 months		
Pencil Hardness	5H	6H	6H		
Adhesion on Copper SO2409,Cross Hatch)	GT0	GT0	GT0		
Resolution solder dam after HAL)	2mil	2mil	2mil		
Soldering Resistance (288°C, 10sec, 3cycles)	Pass	Pass	Pass		
Dielectric strength (V/um)	140-160	-	150-170		
inish Treatment	ENIG, HASL, GOLD PLATING,IMT,OSP				
lalogen Free JPCA-ES-01)	Yes	Yes	Yes		
All data is obtained from Huntsman laboratory testing method, for reference only,					

Photoimageable Solder Mask PROBIMER® 78

General Description

Probimer® 78 halogen free solder masks are designed to meet various application requirements with cost efficiency.

Application

- Telecom
- General Industry

Advantage

- Halogen free, meet JPCA standard
- High resolution
- Wide Process Window
- Outstanding performance in post solder mask process

Product Properties *

Application Method	Screen Printing		
Product Name **	82100/89000	83100/89001	
Color	Green	Blue	
Gloss	Semi-Matt	Glossy	
Viscosity	200-250 dpa.s	200-250 dpa.s	
N.V (wt%)	71-75	71-75	
Shelf Life	12 months	12 months	
Pencil Hardness	8H	8H	
Adhesion on Copper (ISO2409,Cross Hatch)	0-1 GT	0-1 GT	
Resolution (solder dam after HAL)	2mil	2mil	
Soldering Resistance (288°C, 10sec, 3cycles)	Pass	Pass	
Dielectric strength (V/um)	140-150	140-150	
Finish Treatment	ENIG, HASL, GOLD PLATING,IMT,OSP		
Halogen Free (JPCA-ES-01)	Yes Yes		

^{*} All data is obtained from Huntsman laboratory testing method, for reference only.

Huntsman Advanced Materials

Our Advanced Materials division is a leading global chemical

We operate synthesis, formulating and production facilities around the world

HUNTSMAN



Advanced Materials Electronics Industry

Product Selector Guide

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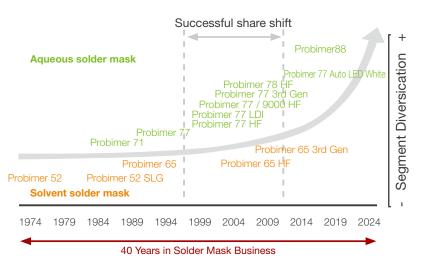
Solution to the industry

Huntsman has over 40 years solder mask experience in PCB industry. Probimer® is our famous brand for solder mask. As a permanent ink on PCB, solder mask provides long term protection with high reliability.

Our Advantages

- Rich experience in Solder Mask development and application
- Global Presence
- Multiple OEM approval
- Focus on customer need

Probimer® Brand over 40 Years in Solder Mask Business



Star Products

Product Group		Product Name	Color	Gloss	Application Method
Solder Mask	Probimer® 77	7179/7180	Green	Semi-Matt	Screen Printing
		1070/1050	Green	Matt	FSP
		8033/8045/8068	Green	Matt	E-Spray
		72101/79001	Green	Semi-Matt	Screen Printing
	Probimer® 77 White	72103/79002	White	Semi-Matt	Screen Printing
		73100/79002	White	Glossy	Screen Printing
		72105/79010	White	Semi-Matt	Screen Printing
	Probimer® 78	82100/89000	Green	Semi-Matt	Screen Printing
		83100/89001	Blue	Glossy	Screen Printing
	Probimer® 88	92101/99001	Green	Semi-Matt	Screen Printing
		Probimer 88 CC	Green	Semi-Matt	Curtain Coat
		92102/99002	Green	Semi-Matt	Screen Printing
Hole Plug-in Ink		7201-4/7180 or 7225-1	Green	-	Screen Printing

^{*} Huntsman internal test result, just for reference.

Photoimageable Solder Mask

PROBIMER® 77

General Description

Probimer® 77 Regular series are photoimageable solder mask. It is designed for high end application which requires high reliability.

Application

- Automotive
- Telecom
- General Industry

- Outstanding performance in post solder mask process
- Well-proven in market

Advantage

- Wide process window
- High Reliability

Product Properties *

Application Method	Screen Printing			E-Spray	Curtain Coat
Product Name **	7179/7180	1070/1050	72101/79001	8033/8045/8068	7177-2/7167-2
Color	Green	Green	Green	Green	Green
Gloss	Semi-Matt	Matt	Semi-Matt	Matt	Semi-Matt
N.V (wt%)	68-72	65-69	72-76	51-55	57-61
Shelf Life	12 months	12 months	12 months	10 months	12 months
Pencil Hardness	7H	7H	7H	7H	6H
Adhesion on Copper (ISO2409,Cross Hatch)	0-1 GT	0-1 GT	0-1 GT	0-1 GT	0-1 GT
Resolution (solder dam after HAL)	2mil	2mil	2mil	2mil	2mil
Soldering Resistance (288°C, 10sec, 3cycles)	Pass	Pass	Pass	Pass	Pass
Dielectric strength (V/um)	120-130	120-130	120-130	105-115	130-150
Finish Treatment	ENIG/IMAg/HASL/IMT/OSP				
Halogen Free (JPCA-ES-01)	No	No	Yes	No	Yes

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** Unless otherwise specified, all products are Probimer® brand

Photoimageable Solder Mask PROBIMER® 77 White

General Description

Probimer® 77 white is designed to meet the customer need for different application. Compared to traditional green color solder mask, they need higher technology ability

Application

- ALED BLU
- LED Lighting

Advantage

- Excellent non-yellowing performance
- Good reflectance for lighting application
- outstanding performance in post solder mask process

Product Properties *

Application Method	Screen Printing			
Product Name **	73100/79002	72103/79002	72105/79010	
Color	White	White	White	
Gloss	Glossy	Semi-matt	Semi-Matt	
1.V (wt%)	70-74	70-74	70-74	
Shelf Life	12 months	12 months	9 months	
Pencil Hardness	6H	6H	6H	
Adhesion on Copper SO2409,Cross Hatch)	0-1 GT	0-1 GT	0-1 GT	
Resolution solder dam after HAL)	4mil	3mil	4mil	
Soldering Resistance 288°C, 10sec, 3cycles)	Pass	Pass	Pass	
Dielectric strength (V/um)	120-130	120-130	120-130	
Finish Treatment		ENIG/HASL/IMT/OSP		
Halogen Free (JPCA-ES-01)	No	No	Yes	

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