

KIMOTO

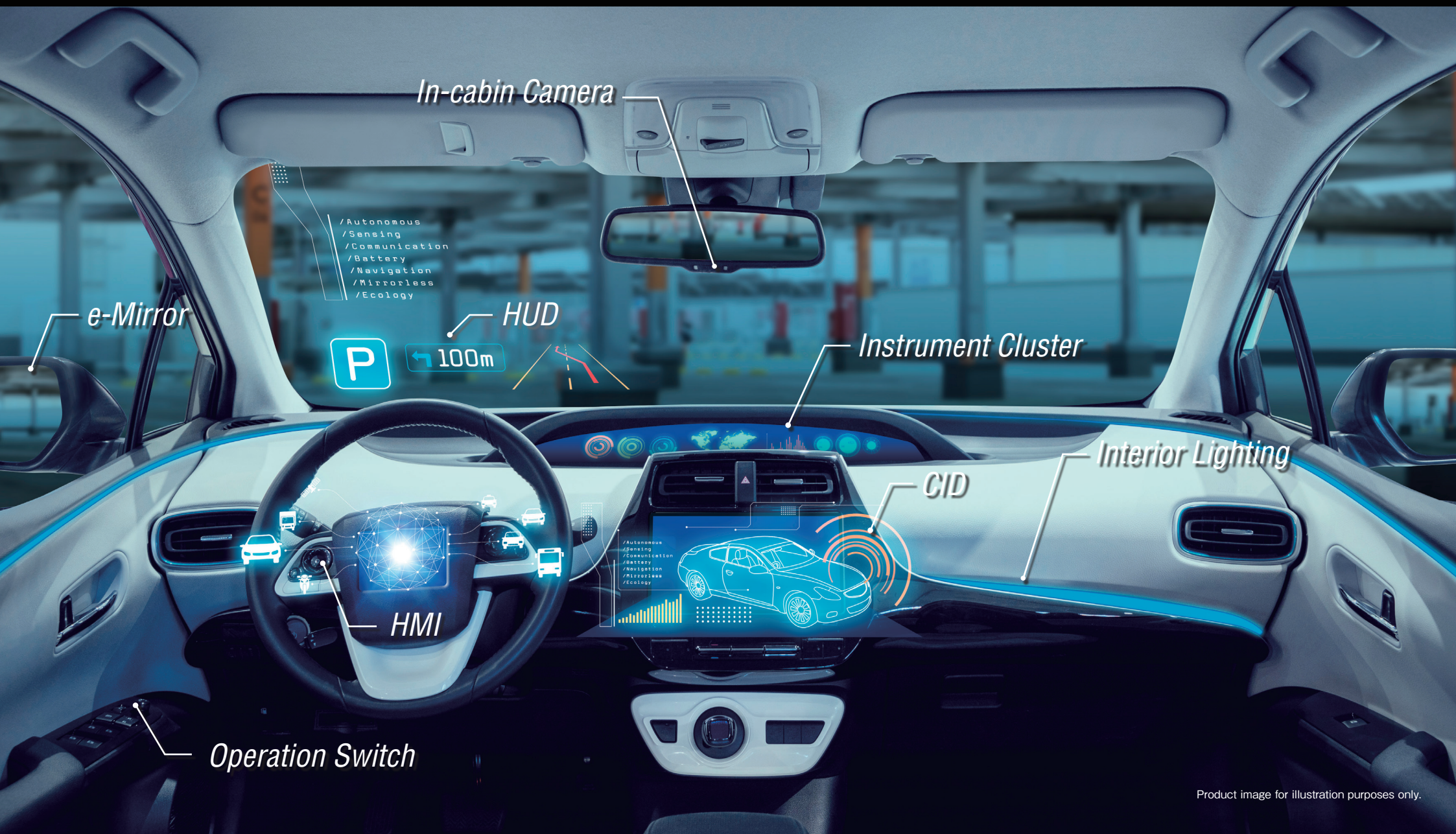


Automotive Products

Applications



Applications



■ ■ LIGHT-UP™, Chemical Matte™ & OptSaver™

Diffusion Film

Make the light brighter and more uniform

Features

- Create brighter and more uniform lighting
- Produces uniform brightness across the complete LED lit LCD display



Product image for illustration purposes only.

■ ■ OptSaver™ PCL52

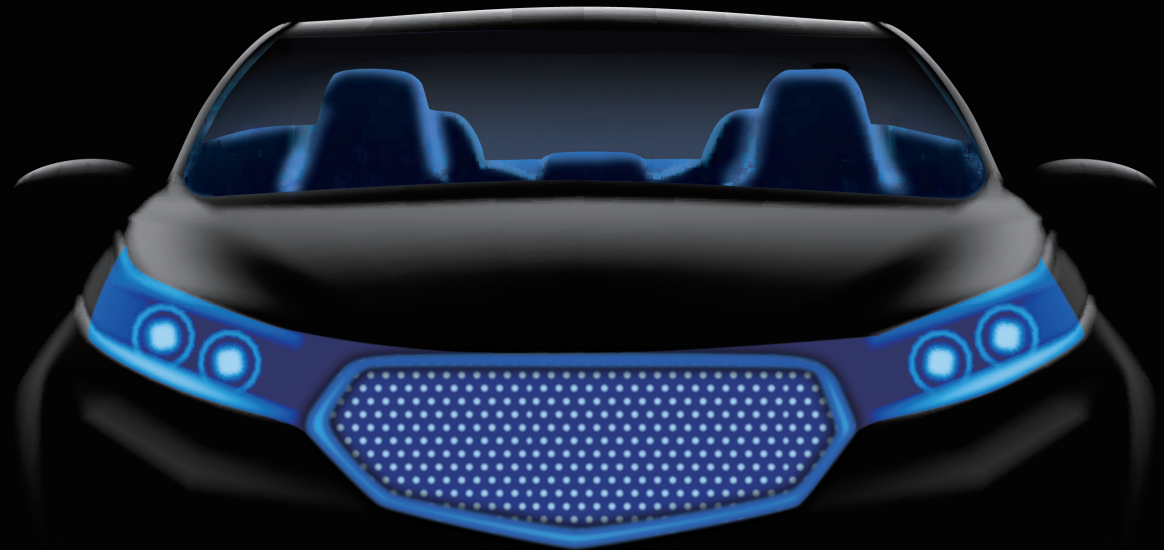
Molding Diffusion Film

3D Lighting without limitations

Features

- 3D design freedom
- No hotspots
- Excellent diffusion
- Formability: Allows elongation up to 200%

Interior & Exterior Lighting





Product image for illustration purposes only.

■■ LevSurf™

Formable HC Molding Film

Formable film for Automotive Electronics

Features

- 3D design freedom
- Excellent scratch resistant
- No curing process
- Better readability due to Anti-glare and Anti-reflective coating
- Anti-fingerprint functionality for touch displays

KB Stick™

Anti-Shatter Film

Features

- High surface hardness
- Excellent scratch resistance
- Excellent chemical and solvent resistance
- Better readability due to Anti-glare and Anti-reflective coating
- Anti-fingerprint functionality for touch displays



Product image for illustration purposes only.



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■ ■ Prosave™

Surface Protection Film

Protects products from a variety of fabrication processes

Features

- Easily peelable
- Excellent visibility
- Excellent heat resistance
- Anti-static surface coating for ESD protection

Light-Blocking Film

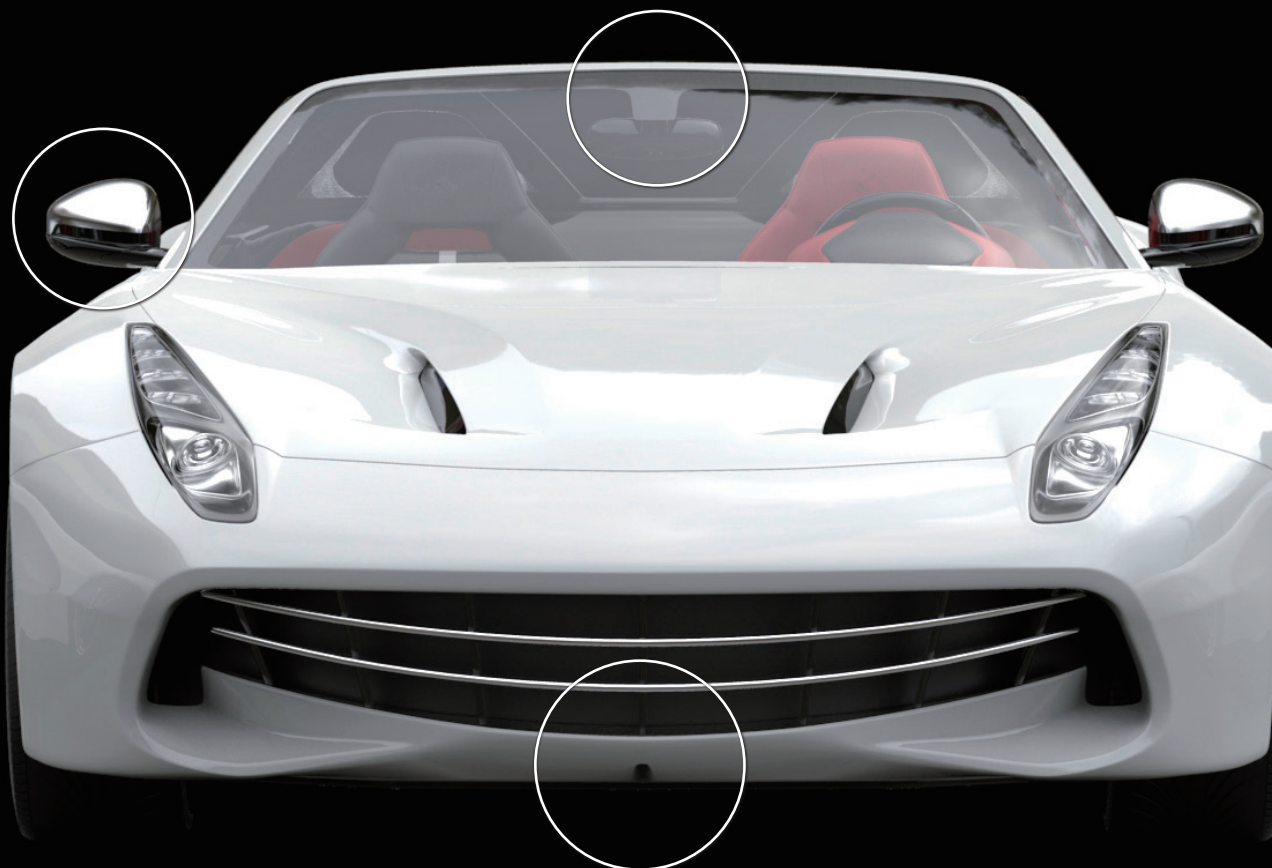
Designed for high performance optical cameras and sensors

Features

- Excellent Light Blocking
- Conductive Surface Resistance
- Light absorbing and low reflection surface coating

Side View Camera

Sensing Camera Drive Recorder



LiDAR

■ ■ Releasy™

Graphics Transfer Film

Production of interior surface markings

Features

- Transfer with high planarity and high accuracy.
- High transparency allows easy handling.
- Matt or Gloss tone appearance.



Product image for illustration purposes only.



■ ■ KIMOTECT™

Protection Film for PCB Photo Mask

High durability and advanced workability

Features

- Excellent mold releasability and solvent resistance.
- Protects from dirt and scratches.
- Easy to remove after use

Detailed Specifications

LIGHT-UP_{TM} & Chemical Matte_{TM}

Diffusion Film												
Features	Stiffness	Anti-Scratch Light guide plate		Low HAZE	Standard							Gray
Type	188LDS	SDW	100LDS	SP6F	SXE	MXE	PWX	PW	PBU	PBA	BLB	PBB
Structure	Diffusion Layer Base PET Anti-Scratch			Diffusion Layer Base PET BC Layer ※ ※SP6F:Clear SXE・MXE:Slightly Matte (Anti-Adhesion)			Diffusion Layer Base PET		Diffusion Layer ※ Base PET Diffusion Layer ※ ※PBB:Gray type			
Total Thickness (μm)	203	115	115	114	115	115	87	138	125	100	97	100
Total light transmittance (%)	99	65	99	94	99	99	40	74	66	87	56	57.5
HAZE (%)	91	93.5	91	67	90	88	93	89.5	89.5	89.5	93	89.5
HWHM (°)	19	35	—	5	20	17	59	17	35	19	57	23
Recommended Use	Wide-Display	NAVI Audio		HUD	Operation Switch, Interior Light Heat Control Panel, BSM (Blind Spot Monitor)							

[Test Method] Total Thickness:JIS K7130 / Total light transmittance,HAZE,HWHM:JIS K 7105

OptSaver_{TM}

Diffusion Film					
Features	Narrow Diffusion Angle with High Light Transmission	Medium Diffusion Angle with High Light Transmission	Wide Diffusion Angle with Medium Light Transmission	Medium-High Diffusion angle with Medium Light Transmission	Wide Diffusion Angle with Medium Light Transmission
Type	L9	L20	L52	L35	L57
Structure	Diffusion Layer PET 100μm BC & Anti-Static Layer (Glossy)			Diffusion Layer PET 100μm Diffusion Layer & AS	
Total Light Transmittance (%)	99	99	67.6	67.6	60
HAZE (%)	93.5	95.2	93.4	95.6	93.1
Gloss	11	6.4	1.4	3.1	1.5
HWHM (°)	9	20	52	35	57

[Test Method] Total light transmittance,HAZE:ASTMD1003 / Gloss:ASTMD523 / HWHM:Illumination angle measured according to DIN5036

※ Values shown are typical values and are not guaranteed.

OptSaver_{TM} PCL52

Molding Diffusion Film	
Features	Formable Diffusion
Type	PCL52
Material Structure	Diffusion Layer PC Film 250μm Protection Film
Total Light Transmittance (%)	71
HAZE (%)	99
b * Value	2.8
Gloss 20° / 60° (%)	0.5 / 1.3
Elongation (%)	>200
HWHM (°)	50
Flammability Test FMV SS302	Passed

[Test Method] Total light transmittance:JIS K 7361-1/ HAZE:JIS K 7136 / b * Value:JIS Z 8729 / Gloss:JIS Z 8741 / Elongation,HWHM:Kimoto Method / Flammability TestFMV SS302

Detailed Specifications

LevSurf_{TM}

Formable HC Molding Film			
Features	Clear, Anti-Finger	CL, Anti-Ref, AF	AG, Anti-Ref, AF
Type	F04	F18	F13
Structure	Protection Film Clear HC Layer PMMA/PC 250μm Protection Film	Protection Film Anti-Reflectance Clear HC Layer PMMA/PC 250μm Protection Film	Protection Film Anti-Reflectance Anti-Glare HC Layer PMMA/PC 250μm Protection Film
Total Light Transmittance (%)	91	94	93
HAZE (%)	0.1	0.1	2.5
Elongation (%)	165	135	135
Pencil Hardness	H	H	H
Contact Angle (°)	110°	102°	103°

[Test Method] Total light transmittance:JIS K7361-1 / HAZE:JIS K 7136 / Elongation,Pencil Hardness:KIMOTO Method / Contact Angle: θ /2 Method (H₂O)

KB Stick_{TM}

Anti-Shatter Film				
Features	Anti-Glare		Non Polarizing to Anti-Reflection	
	Standard	UV-CUT	Standard	Hi-end
Type	125SG90R	125S9U	VIST	VT01
Structure	AG HC Layer PET 125μm Adhesive Layer Separator	UV-Resistant AG HC Layer PET 125μm Adhesive Layer Separator	PET 75μm Anti-Reflectance Layer AG HC Layer TAC 80μm Adhesive Layer Separator	PET 75μm AR AF Layer AG HC Layer TAC 80μm Adhesive Layer Separator
Total Light Transmittance(%)	90.4	90.6	92.9	94.2
HAZE (%)	6.4	4.6	7.2	4.5
Pencil Hardness	3H	3H	3H	3H
Reflective Index (%)	—	—	1.2	0.4
Contact Angle (°)	—	—	103°	114°

[Test Method] Total light transmittance:JIS K7361-1 / HAZE:JIS K 7136 / Pencil Hardness:JIS K 5400basis(125SG90R),JIS K 5400(125S9U),KIMOTO Method(VIST,VT01)
/ Reflective Index:Absolute Specular Reflectance(5°)/Contact Angle:KIMOTO Method

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Detailed Specifications

Prosave™

Surface Protection Film		
Features	Self-Wetting	
Type	SQD3	SQ
Structure	Anti-Static Layer PET 50μm Adhesive Layer 10μm Release Liner 50μm	Anti-Static Layer PET 50μm Adhesive Layer 20μm Release Liner 25μm
Adhesive Force to PET (N/25mm)	0.006	0.02
Adhesive Force to Glass (N/25mm)	0.008	0.01
Adhesive Force to SUS (N/25mm)	0.007	0.02
Adhesive Force to Acrylic (N/25mm)	0.006	0.01

[Test Method] Tensile speed: 300mm/min Peeling angle: 180° from Prosave side.

Prosave™

Adhesive Process Film				
Features	High-Heat Resistance	Carrier Film for Die Cutting		
		Low	Medium	High
Type	Silicon	Acrylic		
Type	GF003B (Under Development)	LS	MS	HS
Structure	Release Liner 50μm Silicone Adhesive Layer 30μm Polyimide Film 25μm	Anti-Static Layer PET 50 or 75μm Adhesive Layer ※ Release Liner 25μm ※LS・HS:7μm、MS:10μm		
Adhesive Force to PET (N/25mm)	4.75	0.06	0.19	0.89
Adhesive Force to Glass (N/25mm)	5.06	0.05	0.17	0.72

[Test Method] Tensile speed: 300mm/min Peeling angle: 180° from Prosave side.

CARBONFEATHER™

Light-Blocking Film			
Features	Heat Resistant		
Type	CX016	CX022	CX042
Structure		Carbon Layer	
		Polyimide Film	
		Carbon Layer	
Total Thickness	16μm	22μm	42μm
Gloss (%)	0.5		0.7
Optical Density	4.9	≥ 5.7	
Surface Resistance Value	10 ⁴ Ω/□		
Recommended use	Sensing Camera, Back Monitor, Front Camera, Side View Camera, Around View Camera, Drive Recorder.		

[Test Method] Gloss:JIS Z 8741 / Optical Density:X-Rite361T / Surface Resistance Value:JIS K 6911

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Detailed Specifications

Releasy™

Graphics Transfer Film		
Features	Silicone	Protection Layer Transfer
Type	MAG01	MAG02
Structure	Gloss Release Layer PET 100μm Sand Matt Release Layer	Protection Layer for Ink Sand Matt Release Layer PET 100μm Sand Matt Release Layer
Total Thickness (μm)	100	
Surface Treatment	Sandblast	
Surface Roughness (Ra)	0.7	
Tape Peeling Force (N/25mm)	Matt Side: 0.1	Protection Layer: 0.1
	Gloss Side: 0.15	Matt Side: 0.2

[Test Method] Surface Roughness:JIS B 601-2001 / Tape Peeling Force:180° peel @ 300mm/min. speed Tape : Nitto 31B tape Tape applied with 2 kg rubber roller. Leave 3hrs under 23°C 50%RH environment.(MAG02:Leave 20hrs under 70°C environment.)

KIMOTECT™

Protection Film for PCB Photo Mask			
Features	Standerd	Fine Pattern	High Durability
Type	HA10K	PA12K	M10FM
Structure	Surface Treatment Clear PET 6μm Adhesive Layer 4μm Release Liner 25μm	Surface Treatment Clear PET 6μm Adhesive Layer 6μm Release Liner 25μm	Surface Treatment Clear PET 6μm Adhesive Layer 4μm Release Liner 25μm
Total Light Transmittance (%)	91.4	91.5	92.4
HAZE (%)	6.0	5.8	1.9
Adhesion Force to PET (N/25mm)	2.1	2.5	2.3

[Test Method] Total light transmittance:JIS K 7361 / HAZE:JIS K 7136 / Adhesion Force to PET:JIS Z 0237

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