

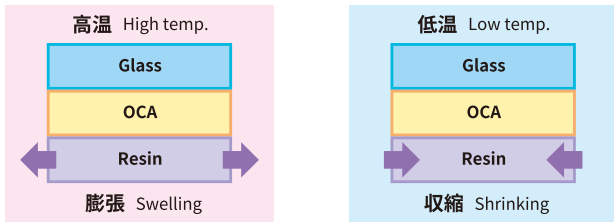
車載向け機能製品 For Automotive Products

異種材料貼合用 OCA Dissimilar Materials Bonding OCA

EA44x Series (Developed)

- 自動車用途(次世代樹脂ルーフ等)⇒ガラス、樹脂板貼合等
For Automotive Use (Next Generation resin roof) ⇒ Bonding Glass and Resin Plate .
- 建材用途(ガラス代替)
For Construction use (Replace Glass with resin plate) .
- 環境負荷の少ない原材料を使用
Use Environmentally Friendly materials.

Heat Cycle Test



Result



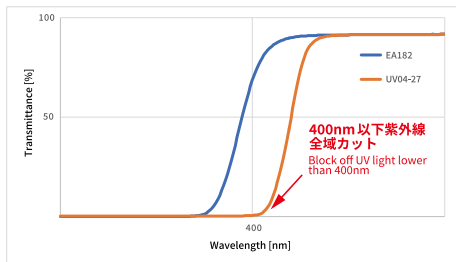
温度変化による材料の膨張・収縮が原因の剥がれを大きく改善
Solve peeling by swelling/ shrinking in temperature change.

長波長紫外線カット OCA

Long wavelength UV Cut OCA

UV04-27 (Developed)

- 自動車用途(次世代サンルーフ等)
For Automotive Use (Next Generation resin roof) .
- 次世代太陽電池
For Next Generation solar Cell .



従来守れなかった波長域から部材を保護
Protect materials from UV light.

TOM 成形用 OCA

OCA for TOM Forming

TM01x Series

- 3D 成形性良好 300% 以上の伸縮性
Excellent for 3-Dimension Forming. >300% elasticity.
- 強粘着、高耐久性
Strong peel adhesive, High durability.



Subject	TM012	一般品 Conventional
厚み (μm) Thickness (μm)	50	5~20 μm
対ABS粘着力(180°) Peel strength to ABS(180°)	40N/25mm	5~15N/25mm
耐熱(80°Cx500hr) ^{※1} Heat Resistance (80°Cx500hr)	○	×
耐水(40°Cx240hr) ^{※1} Water Resistance (40°Cx240hr)	○	×
ヒートサイクル Heat Cycle	○	×

※1 ABS 被着体への成形品で評価 (浮きはがれ・ズレ無し、クロスカット 5B)
Evaluation on ABS adherend (No Peeling, no mis-alignment, Cross cut 5B)
※2 -30°Cx0.5hr ⇄ 100°Cx0.5hr (100cycles)

車載向け遮熱ウィンドウフィルム Heat Shield Film for Automotive (HSF series)

HSF Series

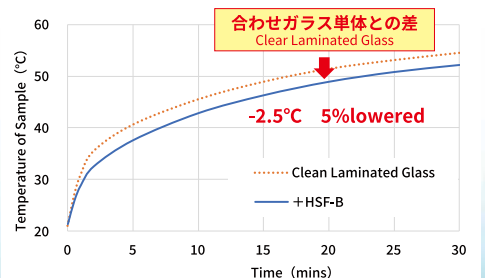
- 遮熱性*
Heat Shield performance
- 高透明、ブルー発色
High transparency, Blue reflection light

ラインアップ比較

	高透過率 High T.T	遮熱性 Heat Shield Performance	ブルー発色 Blue Reflection light
HSF-A	◎	○	○
HSF-B	◎	○	◎



遮熱性 Heat Shield Performance



JIS L1951 人工太陽光源を用いた遮熱性試験
JIS L1951 Heat Shield Performance evaluation by human made sun light

*日射調整フィルム適合品
(JIS S3107 自動車窓ガラス用フィルム)
Compliant to Solar control film (JIS S3107 Automotive window film)

Performance Characteristics

ITEM		Unit	EA447 (Developed)	EA182DD	UV04-27 (Developed)	TM012DD	
Thickness	Heavy Release Liner	μm	100	50	38	50	*1
	Adhesive		175	50	50	50	
	Light Release Liner		75	50	25	50	
UV Protection	Transmittance(at 400nm)	%	-	69	<1.0	-	-
	Transmittance(at 360nm)	%	-	0.0	0.0	-	-
180°Peel adhesion to Glass	After 24hrs	N/25mm	33	32	31	32	*2
Optical characteristics (Including Glass)	Transmittance	%	91.7	93.0	91.9	91.6	*3
	Haze	%	0.1	0.4	0.3	0.1	*4
	L*	-	96.6	96.9	96.6	96.8	*5
	a*	-	0.0	-0.2	-0.5	0.0	
	b*	-	0.1	0.5	3.6	0.2	

ITEM		Unit	HSF-A	HSF-B	
Thickness	Base Film	μm	42	45	*1
	Adhesive		15	12	
	Release Liner		38	38	
180°Peel adhesion to Glass	After 24hrs	N/25mm	4	4	
Optical characteristics (Including Glass)	Visible Light Transmittance	%	86.6	86.3	*6
	Ultraviolet Transmittance	%	0.1	0.1	
	Shading Coefficient	-	0.9	0.9	
	Haze	%	0.8	0.6	*7
	Reflection L*	-	38	38	*8
	Reflection a*	-	19	31	
Reflection b*	-	-35	-49		
Electromagnetic permeability	EM shielding (800MHz)	dB	<0.1	<0.1	*9
Steel Wool scratch test	10times(50g/cm ² load, #0000)	-	Excellent	Excellent	-

※<Technical Data> The test data is measurements and not a guaranteed value.

*1:JIS Z0237,*2:JISZ0237,*3:JIS K7361-1,*4:JIS K7136,*5:JIS Z8781,*6:JIS S3107,*7:JIS K7136,*8:JIS Z8722,*9:KEC method

