

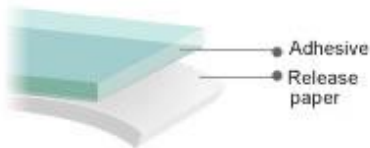
Water proof & Impact force resistant type double coated tapes

# UT6600MLG series

## Features

- Adhesive tape with lower environmental impact with UV curable manufacturing method (non solvent adhesive coating process).
- High impact force resistance. High initial adhesion.
- Excellent water proof performance.

## Structure



	UT6620MLG	UT6625MLG	UT6630MLG
Main component	Acrylic	Acrylic	Acrylic
Carrier	Non-carrier	Non-carrier	Non-carrier
Color	Gray	Gray	Gray
Adhesive thickness (μm)	About 200	About 250	About 300
Release paper thickness (μm)	About 150	About 150	About 150
Bonding strength (N/20mm) ※	28.4	32.1	34.3
St'd size (width & length)	500mm × 50M	500mm × 50M	500mm × 50M

※ 90° Peeling strength

## Suitable use

- Ideal for bonding top plates and housings of cellular phones.

## Technical data

### 1. Bonding strength on various types of substrate(90° peeling)

<Test piece condition>

Tape width : 20mm

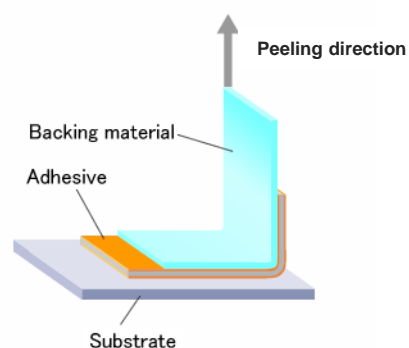
Bonding condition : One stroke with 2-kg roller

Measuring condition: 23°C ± 5°C 60% ± 20% RH

Peeling speed : 300mm/min

Backing material : 50µm SUS foil

[Left at RT for one day before measurement]



< 90° Peeling strength test >

<Test data>

(N/20mm)

		SUS	ABS	PMMA	Glass	AL	PC	SECC
90° Peeling strength	UT6620MLG	28.4	22.9	21.1	28.3	14.7	23.5	17.9
	UT6625MLG	32.1	27.4	26.4	32.2	17.7	27.7	22.9
	UT6630MLG	34.3	29.8	31.3	36.6	18.7	34.5	23.0

### 2. Holding power at different temperatures

<Test piece condition>

Substrate: Stainless steel plate (SUS304)

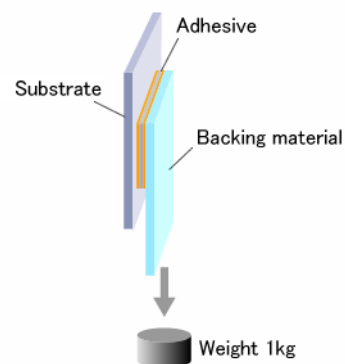
Bonding area : 25mmx25mm

Bonding condition: One stroke with 2-kg roller

Backing material : 25µm PET film

[Left at RT for one hour and then at each temperature for 30 minutes before measurement]

[Measure creep length after one hour application of 1-kg load at each temperature]



<Holding power test>

< Test data >

		40°C	100°C
Creep length (mm)	UT6620MLG	0.2	0.2
	UT6625MLG	0.2	0.2
	UT6630MLG	0.2	0.2

### 3. Impact force resistance

<Test piece condition>

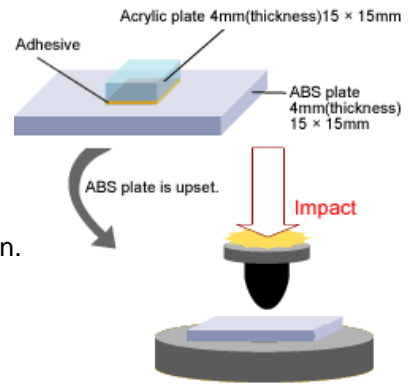
Substrate: ABS plate 50 × 50mm × 4mm  
 PMMA plate 15 × 15mm × 4mm

Bonding area: 15 × 15mm

Measurement condition: RT, 0°C

[Left at RT for 24hours, and then at each temperature for 30min.  
 before measurement.]

[Drop the weight (300g) from 30cm height]



< Test data >

OK=No drop or peeling

< Impact force resistance test >

		RT	0°C
Impact force resistance	UT6620MLG	OK	OK
	UT6625MLG	OK	OK
	UT6630MLG	OK	OK

### 4. Water proof test

<Test piece condition>

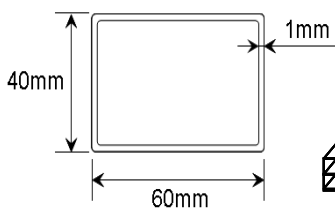
Substrate: ABS plate 45 × 65mm × 1mm  
 PMMA plate 45 × 65mm × 1mm

Bonding area: 40 × 60 × 1mm

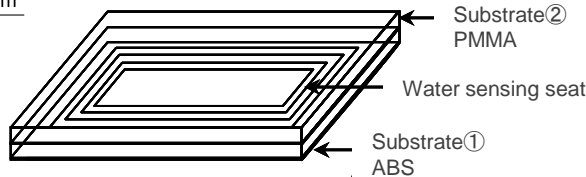
Measurement condition: Sink in tap water(40°C) and apply pressure  
 (equivalent of 10M depth)

Judge by water sensing seat

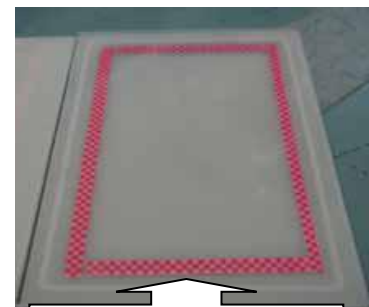
\*Evaluation level: Equivalent of IPX7 or more



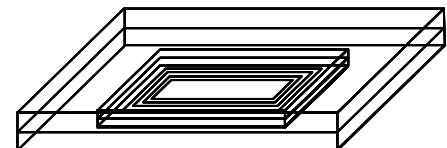
Tape shape



Test piece



Water sensing seat



Sink the test piece in the tray filled with tap water

<Water proof test>

< Test data >

		30min.	60min.
Water proof test	UT6620MLG	OK	OK
	UT6625MLG	OK	OK
	UT6630MLG	OK	OK

## 5. Push strength

<Test piece condition>

Substrate①: ABS plate 100 × 50mm × 5mm (30φ hole)

Substrate②: PMMA plate 50 × 50mm × 3mm

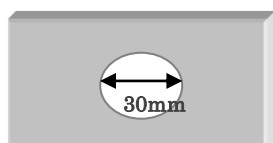
Bonding area: 2mm width 40mm × 40mm

Bonding condition: One stroke with 2kg roller

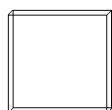
Measurement condition: RT

Push speed: 20mm/min

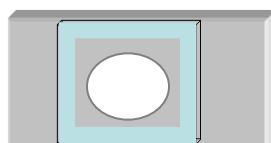
[Left at RT for one hour before measurement]



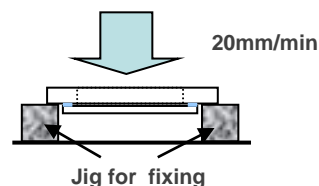
Substrate①



Substrate②



Bond with adhesive tape



Jig for fixing

(N)			
	UT6620MLG	UT6625MLG	UT6630MLG
Push strength	218	201	199

## 6. VHT test

<Test piece condition>

Substrate①: ABS plate 50 × 50mm × 4mm

Substrate②: PMMA plate 40 × 40mm × 1mm

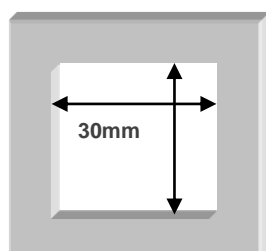
Bonding area: 40mm × 1mm × 2 lines

Bonding condition: One stroke with 2kg roller

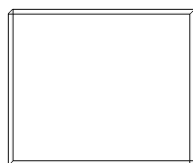
Measurement condition: 60°C95%RH

Weight: 50gf

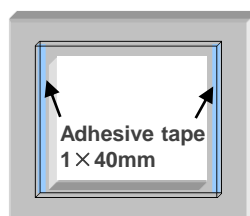
[Left at RT for 24hours, and then at 60°C95%RH for 48hours]



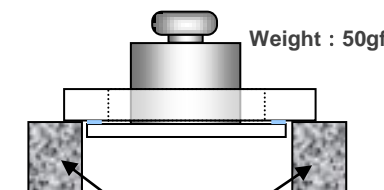
Substrate①ABS :  
50 × 50 × 2 mm



Substrate②PMMA:  
40 × 40 × 1 mm



Adhesive tape  
1 × 40mm



Jig for fixing

< VHT test >

< Test data > OK=No drop or peeling

		UT6620MLG	UT6625MLG	UT6630MLG
VHT test	48 hours	OK	OK	OK

Revision in May, 2012

Note on the characteristic data given— Data on the characteristics of the products described in this catalog are based on the results of evaluations carried out by the company. This does not guarantee that the characteristics of the product conform with your usage environment. Before use, review the usage conditions based on evaluation data obtained from the equipment and substrates actually used.

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