

TEST CERTIFICATE

FROM :Semitech Materials Company

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GRADE : SM-25D

| Uses | | | Release Film | | |
|-------------------------------|-----------|-------------------------------|-----------------|-----------------|---|
| Surface coating | | | Silicon | | |
| Base Material | | | Matt PET | | |
| Color | | | Translucency. | | |
| Specification | | Units | Spec. | Measured Values | Test Methods |
| Average | Thickness | μm | Min. 24 | 24.8 | Micrometer Methods |
| | | | Max. 26 | | |
| Max. Temperature / Cycle Time | | $^{\circ}\text{C}/\text{min}$ | - | 210 / 90 | ASTM D 3418 |
| Use Temperature / Cycle Time | | | - | 200 / 90 | |
| Tensile | Strength | MD | Min. 18.0 | 21.0 | ASTM-D882 |
| | | TD | Min. 16.0 | 21.0 | |
| Elongation | at Breake | MD | Min. 80 | 120 | |
| | | TD | Min. 80 | 90 | |
| Heat | Shrinkage | MD | Max. 1.8 | 1.5 | TSI (150 $^{\circ}\text{C}$ /30min) |
| | | TD | Max. 0.0 | 0 | |
| Surface Roughness | Ra | μm | 0.38 \pm 0.03 | 0.372 | JIS-B0601 |
| | Rz | | 3.8 \pm 0.3 | 3.721 | |
| | Rmax | | 4 \pm 0.3 | 3.937 | |
| Electricity Static | | Kv | - | +0.82 | Electrostatic Fieldmeter FMX-002 (made in japan) |
| Release Force | Max | gf/25mm | 20 \pm 3 | 19.5 | ASTM D-3330 KS M-3725 |
| | Avr. | | 15 \pm 3 | 15.5 | |
| Elasticity | MD | Kgf/mm 2 | - | 410 | ASTM D-882A |
| | TD | | - | 430 | |
| Guarantee | | | 6 month | | |