

Note:
ROHS 3.0 AND REACH Compliant

Test:

| | | |
|--|---------------------------|---------------|
| Test Grade Designation:Each to Reference | | |
| Grade IL/RL | IEC61753 Grade B | |
| Insertion Loss (IL) | 97%≤0.25dB mean≤0.12dB | IEC 61300-3-4 |
| Return Loss (RL) | ≥50dB | IEC 61300-3-6 |
| Test Wavelength | 1310nm | Single-Mode |
| End face inspection | ×400 | |

MATERIAL LIST:

| | | | |
|----|--|-------|--------|
| ⑧ | Fiber Optical Cable Duplex ϕ 2.0 OS2 G652.D 9/125um Yellow LSZH | L | |
| ⑦ | Black Heat shrink tubing | 2 | |
| ⑥ | Ring 1, 2 | 4 | |
| ⑤ | LC White Boot | 4 | |
| ④ | LC blue Clip | 2 | |
| ③ | LC 2.0 SM Blue Duplex Connector | 4 | |
| ② | LC/UPC SM Ferrule ϕ 125-126um | 4 | |
| ① | LC White Dust cap | 4 | |
| NO | SPECIFICATION STANDARD | QT' Y | REMARK |

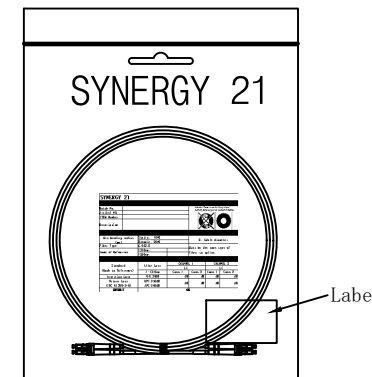
| | | | | | | | |
|--------------|--|---------------------|------------|----------|---------------|--|--|
| SYNERGY 21 | | | | | | | |
| CUSTOMER | | | | ITEM NO. | See the chart | | |
| PRODUCT NAME | LC/UPC-LC/UPC OS2 9/125um Duplex LSZH Patch cord | Manufacture country | CHINA | UNIT | MM | | |
| DRAWNBY | CHECKBY | APPOBY | DATE | | | | |
| SYNERGY 21 | SYNERGY 21 | SYNERGY 21 | 2017-10-15 | | | | |

| | | | | |
|----|-----|--------------------------------|------------|------|
| | | Changed the ring number to 1,2 | 2022-11-1 | A2 |
| | | Update test data | 2022-4-06 | A1 |
| | | NEW | 2017-10-15 | A |
| BY | CHK | REVISION RECORD MODIFICATIONS | DATE | REV. |

chart:

| NO. | ITEM NO. | LENGTH. | color | EAN Nummer | PACKING |
|-----|----------|---------|--------|---------------|------------------|
| 1 | S216746 | 0.5M | Yellow | 4038816068842 | SYNERGY 21 BAG A |
| 2 | S216747 | 1M | Yellow | 4038816147608 | SYNERGY 21 BAG A |
| 3 | S216748 | 1.5M | Yellow | 4038816068866 | SYNERGY 21 BAG A |
| 4 | S216749 | 2M | Yellow | 4038816068873 | SYNERGY 21 BAG A |
| 5 | S216750 | 3M | Yellow | 4038816068880 | SYNERGY 21 BAG B |
| 5 | S216751 | 5M | Yellow | 4038816068910 | SYNERGY 21 BAG B |
| 5 | S216752 | 7.5M | Yellow | 4038816147615 | SYNERGY 21 BAG B |
| 5 | S216753 | 10M | Yellow | 4038816068927 | SYNERGY 21 BAG B |

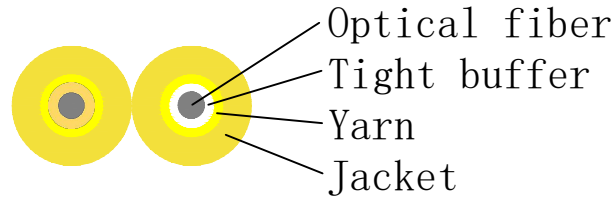
PACKING DRAW



PACKING:SYNERGY 21 PE BAG+LABEL

| SYNERGY 21 | | | | | | | | | |
|-------------------------------|-----|-----|------------|--|------------|---------------------|------------|---------------|---------|
| CUSTOMER | | | | | | ITEM NO. | | See the chart | |
| PRODUCT NAME | | | | LC/UPC-LC/UPC OS2 9/125um Duplex LSZH Patch cord | | Manufacture country | | CHINA | UNIT MM |
| DRAWNBY | | | CHECKBY | | | APPOBY | | DATE | |
| BY | CHK | NEW | 2017-10-15 | A | SYNERGY 21 | SYNERGY 21 | SYNERGY 21 | 2017-10-15 | |
| REVISION RECORD MODIFICATIONS | | | | DATE | REV. | | | | |

Cable cross-section



G652D Characteristic of Optical Fiber

| Item | | Unit | Specification |
|---|-----------------------------------|---------------------------|---------------|
| | | | G. 652D |
| Mode field diameter | 1310nm | μm | 9.2 ± 0.4 |
| | 1550nm | μm | 10.4 ± 0.5 |
| Cladding diameter | | μm | 124.3~125.0 |
| Cladding non-circularity | | % | ≤1.0 |
| Core concentricity error | | μm | ≤0.5 |
| Coating diameter | | μm | 245 ± 5 |
| Coating/cladding concentricity error | | μm | ≤10 |
| Cable cut-off wavelength | | nm | ≤ 1260 |
| Attenuation Coefficient | 1310nm | dB/km | ≤0.35 |
| | 1550nm | dB/km | ≤0.21 |
| Macro-bend loss (100 turn, 60mm radius) | 1550nm | dB | ≤0.03 |
| | 1625nm | dB | ≤0.05 |
| Proof stress level | | kpsi | 100 |
| PMD | Maximum Individual Fiber | ps/√km | ≤0.2 |
| | Link Design Value (M=20, Q=0.01%) | ps/√km | ≤0.1 |
| Effective group index of refraction | 1310nm | / | 1.4672 |
| | 1550nm | / | 1.4683 |
| Zero dispersion wavelength | | nm | 1300~1324 |
| Zero dispersion slope | | ps/(nm ² · km) | ≤0.091 |
| Zero dispersion slope typical value | | ps/(nm ² · km) | |

Other parameters meet standard ITU-T G.652D

Cable structure and parameter

| Item | Contents | Unit | Value | |
|------------------------|------------|---------|--|-----|
| Tight buffer fiber | Diameter | mm | 0.9±0.05 | |
| | Material | / | LSZH | |
| Filler | Material | / | Yarn | |
| | Diameter | mm | 2.0(±0.1)×4.1(±0.2) 3.0(±0.1)×6.1(±0.2) | |
| Outer jacket | Material | / | LSZH | |
| | Color | / | SM: Yellow OM1/OM2: Orange OM3:Aqua OM4:Violet | |
| Tensile performance | Short term | N | Cable OD:1.2(±0.1)mm; 1.6(±0.1)mm | 30 |
| | | | Cable OD:3.0(±0.1)*6.0(±0.2)mm; 2.0(±0.1)*4.0(±0.2)mm | 40 |
| | Long term | N | Cable OD:1.2(±0.1)mm | 20 |
| | | | Cable OD:1.6(±0.1)mm Cable OD:3.0(±0.1)*6.0(±0.2)mm; 2.0(±0.1)*4.0(±0.2)mm | 40 |
| Crush | Short term | N/100mm | Cable OD:1.2(±0.1)mm | 200 |
| | | | Cable OD:1.6(±0.1)mm;3.0(±0.1)*6.0(±0.2)mm; 2.0(±0.1)*4.0(±0.2)mm | 500 |
| Crush | Long term | N/100mm | Cable OD:1.2(±0.1)mm;1.6(±0.1)mm | 100 |
| | | | Cable OD:3.0(±0.1)*6.0(±0.2)mm; 2.0(±0.1)*4.0(±0.2)mm | 200 |
| Cable attenuation | | dB/km | SM: ≅ 0.4 at 1310nm, ≅ 0.3 at 1550nm MM: ≅ 1.0 at 1300nm, ≅ 3.0 at 850nm | |
| Cable weight (Approx.) | | kg/km | 7.3 13.5 | |

SYNERGY 21

| | | | | | | | | | | |
|----|-----|-------------------------------|------------|-----|--------------|-------------------|---------------------|---------------|------|----|
| | | | | | CUSTOMER | | ITEM NO. | see the chart | | |
| | | | | | PRODUCT NAME | Fiber optic cable | Manufacture country | CHINA | UNIT | MM |
| | | NEW | 2021-11-08 | A | DRAWNBY | CHECKBY | APPOBY | DATE | | |
| BY | CHK | REVISION RECORD MODIFICATIONS | DATE | REV | SYNERGY 21 | SYNERGY 21 | SYNERGY 21 | 2021-11-08 | | |