



| Sheath Printing | Maximum Referenced Frequency |
|---|------------------------------|
| CAT5E UTP EIA/TIA-568-C.2 4PR 24AWG CMR (UL) E502360 75°C ROHS COMPLIANT S1747 xxx FT | 100 MHZ |

| Reference Standards | Electrical Characteristics |
|-------------------------|---|
| YD/T1019-2013 | 20°C Conductor Resistance Ω / km ≤93.5 |
| ANSI/TIA-568B-C.2 | Pair to Pair Capacitance Unbalance % ≤2 |
| ISO/IEC11801 IEC61156.5 | Pair to Ground Capacitance Unbalance % / |
| UI444, UL1666, CE, RoHS | Coupling Attenuation at 30~100 MHz dB / |

| Cable Construction | Physical Performance (Before Ageing) | Unit |
|---------------------------------------|--------------------------------------|-----------------|
| Conductor: Solid Oxygen-free Copper | Elongation at Break of the Sheath | LSZH: % ≥125 |
| Number of Pairs: 4P | | PVC: % ≥150 |
| Conductor OD: 24AWG 0.48 (+/-0.005)mm | Tensile Strength of the Sheath | LSZH: Mpa ≥10.0 |
| Insulation Material: HDPE | | PVC: Mpa ≥13.5 |

| Environmental Characteristics (After Ageing) | Unit | |
|--|-----------------------------|--|
| Elongation at Break of the Sheath after Ageing (Ageing Condition: 7 days at (100 ± 2) °C) | | |
| Sheath Material: PVC | After Ageing (Average) LSZH | Elongation at Break: % ≥100 |
| Sheath Thickness: 0.55 (+/-0.05)mm | | Elongation at Break Change Rate: % -30~+30 |
| Sheath OD: 5.1 (+/-0.05)mm | After Ageing (Average) PVC | Elongation at Break: % ≥125 |
| Operating Temperature: -20°C to 60°C | | Elongation at Break Change Rate: % -30~+30 |
| Lay Length (mm): ≤30 | | |

| Tensile Strength of the Sheath after Ageing (Ageing Condition: 7 days at (100 ± 2) °C) | | |
|--|-----------------------------|--|
| Net Weight: 8.8kg/305m | After Ageing (Average) LSZH | Sheath Tensile: % ≥8.0 |
| Pair Colors | | Sheath Tensile Strength Change Rate: % -30~+30 |
| P1: Blue, White/Blue | After Ageing (Average) PVC | Sheath Tensile Strength: % ≥12.5 |
| P2: Orange, White/Orange | | Sheath Tensile Strength Change Rate: % -30~+30 |
| P3: Green, White/Green | Cold Bend Test | No Cracking at -20° C, 8 times of the Sheath OD for 4 hours. |
| P4: Brown, White/Brown | Heat Shock Test | No Cracking at 150° C 1 hour. |

| Performance Parameters: FLUKE Permanent Link Test | | | | | | | | | |
|---|----------------------|----------------------------|-----------|--------------|------------|---------------|---------------|------------------|----------|
| Frequency Point | Propagation Velocity | Attenuation (Max) at 20° C | TCL (Min) | EL TCL (Min) | NEXT (Min) | PS NEXT (Min) | EL FEXT (Min) | PS EL FEXT (Min) | RL (Min) |
| MHZ | m/s | dB | dB | dB | dB | dB | dB/100m | dB/100m | dB |
| 4 | ≥0.604C | 4.1 | 44 | 23 | 56.3 | 53.3 | 52 | 49 | 23 |
| 8 | ≥0.610C | 5.8 | 41 | 16.9 | 51.8 | 48.8 | 45.9 | 42.9 | 24.5 |
| 10 | ≥0.612C | 6.5 | 40 | 15 | 50.3 | 47.3 | 44 | 41 | 25 |
| 16 | ≥0.614C | 8.2 | 38 | 10.9 | 47.2 | 44.2 | 39.9 | 36.9 | 25 |
| 20 | ≥0.615C | 9.3 | 37 | 9 | 45.8 | 42.8 | 38 | 35 | 25 |
| 25 | ≥0.616C | 10.4 | 36 | 7 | 44.3 | 41.3 | 36 | 33 | 24.3 |
| 31.25 | ≥0.617C | 11.7 | 35.1 | / | 42.9 | 39.9 | 34.1 | 31.1 | 23.6 |
| 62.5 | ≥0.618C | 17 | 32 | / | 38.4 | 35.4 | 28.1 | 25.1 | 21.5 |
| 100 | ≥0.619C | 22 | 30 | / | 35.3 | 32.3 | 24 | 21 | 20.1 |