

7814A 24AWG,4 Pair, UTP Cat 6 PVC

| Metric Version |
|------------------------|
| See Put-ups and Colors |
| |

Description:

24 AWG solid bare annealed copper conductors, non-plenum, Thermoplastic Polyolefin insulation, centre spline, rip cord, twisted pairs, see color code chart (below), PVC jacket (blue or gray).

SUITABLE APPLICATIONS:

Suitable Applications

Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

| Number of Pairs | 4 |
|----------------------------|----------------------|
| Total Number of Conductors | 8 |
| AWG | 24 |
| Stranding | Solid |
| Conductor Material | Bare Annealed Copper |
| | |

INSULATION:

Insulation Material

Thermoplastic Polyolefin

Pair Color Code Chart :

| Number | Color | Number | Color |
|--------|-----------------------------|--------|---------------------------|
| 1 | White/Blue Rings & Blue | 3 | White/Green Rings & Green |
| 2 | White/Orange Rings & Orange | 4 | White/Brown Rings & Brown |

OUTER SHIELD:

| Outer Shield Material | Unshielded |
|-----------------------|------------|
| OUTER JACKET: | |
| Outer Jacket Material | PVC |
| Outer Jacket Ripcord | Yes |



7814A 24AWG,4 Pair, UTP Cat 6 PVC

| OVERALL NOMINAL DIAMETER: | |
|--|---|
| Overall Nominal Diameter | 5.80 ± 0.50 mm |
| MECHANICAL CHARACTERISTICS: | |
| Operating Temperature Range | -20°C To +80°C |
| Bulk Cable Weight | 36.3Kg/Km |
| Max. Recommended Pulling Tension | 110N |
| Min. Bend Radius (Install) | 25.4mm |
| APPLICABLE SPECIFICATIONS AND AGENCY O | COMPLIANCE: |
| APPLICABLE STANDARDS: | |
| NEC/(UL) Specification | СМ |
| CEC/C(UL) Specification | CM |
| IEC Specification | ISO 11801 |
| TIA/EIA Specification | 568-B.2-1 Category 6 |
| Other Specification | Category 6, UL verified to Category 6, ETL, ANSI/TIA/EIA-568B.2-1 |
| FLAME TEST: | |
| UL Flame Test | UL Type CM |
| PLENUM/NON-PLENUM: | |
| Plenum (Y/N) | Ν |
| Plenum Number | - |

ELECTRICAL CHARACTERISTICS - PREMISE:

Premise Cable Electricals Table 1 :

| Frequency (MHz) | Insertion Loss (dB/100 m) | NEXT (dB) | PSNEXT (dB) | ACR (dB) | PSACR (dB) | Return Loss (dB) | PSELFEXT (dB/100m) |
|--------------------|------------------------------|--------------|----------------|----------|---------------|---------------------|-----------------------|
| 1 | 2.0 | 74.3 | 72.3 | 72 | 70.3 | 20.0 | 64.8 |
| 4 | 3.8 | 65.3 | 63.3 | 61 | 59.5 | 23.0 | 52.8 |
| 8 | 5.3 | 60.8 | 58.8 | 55 | 53.5 | 24.5 | 46.7 |
| 10 | 6.0 | 59.3 | 57.3 | 53 | 51.3 | 25.0 | 44.8 |
| 16 | 7.6 | 56.2 | 54.2 | 49 | 46.6 | 25.0 | 40.7 |
| 20 | 8.5 | 54.8 | 52.8 | 46 | 44.3 | 25.0 | 38.8 |
| 25 | 9.5 | 53.3 | 51.3 | 44 | 41.8 | 24.3 | 36.8 |
| 31.25 | 10.7 | 51.9 | 49.9 | 41 | 39.2 | 23.6 | 34.9 |
| 62.5 | 15.4 | 47.4 | 45.4 | 32 | 30.0 | 21.5 | 28.9 |
| 100 | 19.8 | 44.3 | 42.3 | 25 | 22.5 | 20.1 | 24.8 |
| 200 | 29.0 | 39.8 | 37.8 | 11 | 8.80 | 18.0 | 18.8 |
| 250 | 32.8 | 38.3 | 36.3 | 06 | 3.50 | 17.3 | 16.8 |

7814A 24AWG,4 Pair, UTP Cat 6 PVC

| Frequency (MHz) | Characteristics Impedance (Ohms) | ELFEXT (dB/100m) | | |
|--------------------|-------------------------------------|------------------|--|--|
| 1 | 100 ± 15 | 67.8 | | |
| 4 | 100 ± 15 | 55.8 | | |
| 8 | 100 ± 15 | 49.7 | | |
| 10 | 100 ± 15 | 47.8 | | |
| 16 | 100 ± 15 | 43.7 | | |
| 20 | 100 ± 15 | 41.8 | | |
| 25 | 100 ± 15 | 39.8 | | |
| 31.25 | 100 ± 15 | 37.9 | | |
| 62.5 | 100 ± 15 | 31.9 | | |
| 100 | 100 ± 15 | 27.8 | | |
| 200 | 100 ± 15 | 21.8 | | |
| 250 | 100 ± 15 | 19.8 | | |

Premise Cable Electricals Table 2 :

PUT-UPS AND COLORS:

| Item | Description | Put-Up (ft. /m) | Ship Weight (kg.) | Jacket Color | Notes |
|-----------|--------------|-----------------|-------------------|--------------|-------|
| 7814A 006 | 4 PR #24 PVC | 1000 / 305 | 11.25 | BLUE | |
| 7814A F6H | 4 PR #24 PVC | 1000 / 305 | 11.25 | GRAY | |

© 2006 Belden Wire & Cable Company

All Rights Reserved.

Although Belden Electronics Division ("Belden") makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Note – this tech data is subject to change without notice Rev June2007