TIMES FIBER COMMUNICATIONS, INC.®
1-800-677-2288

# 50 Ω Power Cable T10

## DETAILS OF CONSTRUCTION AND MATERIALS

- Center Conductor - Solid Copper
- Dielectric - Foam Polyethylene
- Outer Conductor - Seamless Aluminum
- Jacket - Black Polyethylene with Identification Tracers (Yellow or Red)

Application: 50 V Power Cable is recommended for installation in systems where a centralized powering system is used.

## PART NUMBERS

| DESCRIPTION | MI |
|---|---|
| SPC625JVISC (50 Ohm) Aerial | 29631 |
| SPC625JBVISC (50 Ohm) Burial | 29632 |

## PHYSICAL SPECIFICATIONS

| NOMINAL DIMENSIONS | inches | (mm) |
|---|---|---|
| Conductor | 0.218 | (5.54) |
| Dielectric | 0.563 | (14.3) |
| Outer Conductor | 0.625 | (15.9) |
| Jacketed (Aerial) | 0.685 | (17.4) |
| Jacketed (Burial) | 0.695 | (17.7) |
| Cable Weight, lbs per kft (kg/km) | 268 | (399) |

## ELECTRICAL SPECIFICATIONS

| | Ohms/kft | (Ohms/km) |
|---|---|---|
| **Nominal DC Resistance at 68°F (20°C)** | | |
| Center Conductor | 0.22 | (0.72) |
| Outer Conductor | 0.23 | (0.75) |
| Loop | 0.45 | (1.48) |
| **Nominal Capacitance** | 23.10 pF/ft | (75.8 pF/m) |
| **Impedance** | 50 ± 2 Ohms | |
| **Velocity of Propagation** | 87% nominal | |

## TYPICAL ATTENUATION @ 68°F (20°C)

| Frequency MHz | dB per 100 feet | dB per 100 meters |
|---|---|---|
| 5 | 0.14 | 0.46 |
| 55 | 0.46 | 1.51 |
| 211 | 0.92 | 3.02 |
| 250 | 1.01 | 3.31 |
| 270 | 1.05 | 3.44 |
| 300 | 1.11 | 3.64 |
| 330 | 1.17 | 3.84 |
| 350 | 1.21 | 3.97 |
| 400 | 1.30 | 4.27 |
| 450 | 1.38 | 4.53 |
| 500 | 1.46 | 4.79 |
| 550 | 1.54 | 5.05 |
| 600 | 1.61 | 5.28 |
| 750 | 1.82 | 5.97 |
| 870 | 1.97 | 6.46 |
| 1000 | 2.13 | 6.99 |

Attenuation increases with increasing temperature and decreases with decreasing temperature at the rate of 0.1% / °F (0.18% / °C)