

天津中环安讯达科技有限公司 / TIANJIN ZHONGHUAN ASCEND TECHNOLOGIES CO.,LTD.

HCAHY (YZ) -50-9 (1/2" S)



| 电缆种类 /Cables model | | | 电缆衰减和平均功率 /Attenuation and Average Power | | |
|---|---------------------------------------|--------------|--|-----------------|---------------------|
| 标准电缆 /Standard Cable | | | 频率 /Frequency | 衰减 /Attenuation | 平均功率 /Average Power |
| 阻燃电缆 /Fire Retardant Cable | | | MHz | dB/100m | kW |
| 1/2" S | 聚乙烯护套 / PE Jacket | HCAHY-50-9 | 0.5 | 0.23 | 15.6 |
| 1/2" S | 低烟无卤阻燃聚乙烯护套 /Fire-Retardant PE Jacket | HCAHYZ-50-9 | 1 | 0.32 | 15.6 |
| 物理特性 /Mechanical Specifications | | | 1.5 | 0.40 | 15.6 |
| 内导体 | 铜包铝线 | 3.6mm | 2 | 0.46 | 15.6 |
| /Inner Conductor | /CCA | | 10 | 1.03 | 10.1 |
| 绝缘层 | 物理发泡聚乙烯 | 9.1mm | 20 | 1.48 | 7.07 |
| /Insulation | /Physical foam polyethylene | | 30 | 1.81 | 5.75 |
| 外导体 | 螺旋形皱纹铜管 | 12.0mm | 50 | 2.36 | 4.42 |
| /Outer conductor | /Helix copper tube | | 87 | 3.16 | 3.30 |
| 外护套 | 耐光热聚乙烯 / PE | 13.55mm | 100 | 3.38 | 3.08 |
| /Jacket | (低烟无卤阻燃聚烯烃 / FRNC) | (13.55mm) | 108 | 3.51 | 2.96 |
| 最小弯曲半径 (单次弯曲) | | 17mm | 150 | 4.17 | 2.49 |
| /Minimum bending radius(single bend) | | | 174 | 4.51 | 2.30 |
| 最小弯曲半径 (重复弯曲) | | 35mm | 200 | 4.86 | 2.14 |
| /Minimum bending radius(repeated bends) | | | 300 | 6.03 | 1.72 |
| 最小弯曲次数 (典型值) | | 20 | 400 | 7.05 | 1.48 |
| /Minimum number of bends(typical) | | | 450 | 7.48 | 1.38 |
| 拉伸强度 /Tensile Strength | | 800N | 500 | 7.96 | 1.31 |
| 安装温度 | 耐光热聚乙烯 / PE | -20°C ~ 60°C | 512 | 8.07 | 1.29 |
| /Installation temperature | (低烟无卤阻燃聚烯烃 /FRNC) | -20°C ~ 60°C | 600 | 8.80 | 1.18 |
| 储存温度 | 耐光热聚乙烯 / PE | -40°C ~ 70°C | 700 | 9.58 | 1.09 |
| /Storage temperature | (低烟无卤阻燃聚烯烃 /FRNC) | -25°C ~ 80°C | 800 | 10.30 | 1.01 |
| 电气特性 /Electrical Characteristics | | | 824 | 10.50 | 0.99 |
| 特性阻抗 /Impedance | | 50Ω±1 Ω | 900 | 11.09 | 0.91 |
| 最高使用频率 /Maximum Frequency | | 10.2GHz | 960 | 11.49 | 0.90 |
| 截止频率 /Cut-off frequency | | 13.0GHz | 1000 | 11.68 | 0.88 |
| 传播速度 /Velocity Ratio | | 81% | 1250 | 13.27 | 0.780 |
| 峰值功率 /Peak Power | | 16 kW | 1500 | 14.75 | 0.705 |
| 绝缘电阻 /Insulation resistance | | ≥10000MΩ·km | 1700 | 15.84 | 0.656 |
| 直流击穿电压 /DC breakdown voltage | | 2500V | 1800 | 16.44 | 0.634 |
| 标准电容 /Nominal Capacitance | | 83pF/m | 2000 | 17.43 | 0.597 |
| 电感 /Inductance | | 0.19μH/m | 2100 | 17.92 | 0.580 |
| 电压驻波比 (VSWR) | 400MHz ~ 500MHz | ≤ 1.10 | 2200 | 18.42 | 0.564 |
| | 800MHz ~ 1000MHz | ≤ 1.10 | 2400 | 18.71 | 0.552 |
| | 1700MHz ~ 2200MHz | ≤ 1.10 | 3000 | 22.28 | 0.421 |
| | 0MHz ~ 3000MHz | ≤ 1.15 | 4000 | 26.44 | 0.394 |
| | 3000MHz ~ 4000MHz | ≤ 1.20 | 6000 | 34.06 | 0.306 |
| | 4000MHz ~ 6000MHz | ≤ 1.28 | 8000 | 40.99 | 0.254 |

测试条件：测衰减时，周围温度 20°C；测平均功率时，周围温度 40°C，内导体温度 100°C；以上测试电缆 VSWR 均为 1.0

Standard Conditions: For attenuation.VSWR 1.0 ambient temperature 20°C ;For Average power.VSWR 1.0, ambient temperature 40°C ;inner conductor temperature100°C ,no solar loding.