

FLEXIBLE RF CABLE

HHTAY-50-42 (1-5/8")



CONSTRUCTION MATERIALS

| | |
|-----------------|----------------------------|
| Inner Conductor | Helical Copper Tube |
| Dielectric | Physical Foam Polyethylene |
| Outer Conductor | Corrugated Copper Tube |
| Jacket | Black PE |

PHYSICAL DIMENSIONS

| | |
|--------------------------|----------|
| Inner Conductor Diameter | 18.00 mm |
| Dielectric Diameter | 42.80 mm |
| Outer Conductor Diameter | 46.50 mm |
| Diameter Over Jacket | 49.50 mm |

MECHANICAL SPECIFICATIONS

| | |
|-------------------------|--------|
| Minimum Bending Radius | |
| Single Bending | 200 mm |
| Repeated Bending | 510 mm |
| Minimum Number of Bends | 15 |
| Tensile Strength | 3300 N |

ELECTRICAL SPECIFICATION

| | |
|--------------------------------|------------|
| Capacitance | 76.0 pF/m |
| Impedance | 50±1 Ω |
| Velocity | 88% |
| RF Peak Voltage | 5.70 KV |
| Peak Power Rating | 320 KW |
| Cut-off Frequency | 2.80 GHz |
| Shielding Effectiveness >10MHz | >120 dB |
| Insulation Resistance | 5000 MQ•km |
| VSWR | |
| 0.8~1.0 GHz | ≤1.13 |
| 1.7~2.2 GHz | ≤1.13 |
| 2.2~2.7 GHz | ≤1.15 |

ENVIRONMENTAL SPECIFICATION

| | |
|--------------------------|-----------------|
| Storage Temperature | -55 °C ~ +85 °C |
| Installation Temperature | -40 °C ~ +60 °C |
| Operation Temperature | -55 °C ~ +85 °C |

PERFORMANCE

| Frequency MHz | Attenuation | | Average Power Rating (kW) |
|------------------|-------------|-----------|------------------------------|
| | dB/100 m | dB/100 ft | |
| 100 | 0.63 | 0.19 | 16.90 |
| 150 | 0.80 | 0.24 | 13.48 |
| 200 | 0.95 | 0.29 | 11.60 |
| 280 | 1.15 | 0.35 | 9.47 |
| 450 | 1.46 | 0.45 | 7.36 |
| 800 | 2.04 | 0.62 | 5.26 |
| 900 | 2.18 | 0.66 | 4.93 |
| 1000 | 2.32 | 0.71 | 4.61 |
| 1500 | 3.00 | 0.91 | 3.64 |
| 1800 | 3.30 | 1.01 | 3.27 |
| 2000 | 3.52 | 1.07 | 3.00 |
| 2200 | 3.72 | 1.13 | 2.85 |
| 2400 | 3.95 | 1.20 | 2.70 |
| 2500 | 4.07 | 1.24 | 2.61 |
| 2700 | 4.20 | 1.28 | 2.53 |

Standard Conditions :

For attenuation : VSWR 1.0 , cable temperature 20 °C (68 °F)

For average power : VSWR 1.0 , ambient temperature 40 °C (104 °F) ,

Inner conductor temperature 100 °C (212 °F) . No solar loading .

Maximum attenuation value shall be 105% off the nominal attenuation value.