

## Leaky Cable

|       |       |         |         |
|-------|-------|---------|---------|
| 1/2"C | 7/8"C | 1-1/4"C | 1-5/8"C |
| 1/2"D | 7/8"D | 1-1/4"D | 1-5/8"D |
| 1/2"H | 7/8"H | 1-1/4"H |         |

### Description:

Leaky coaxial cable has both signal transmission and antenna functions. By controlling the opening of the outer conductor, the controlled electromagnetic wave energy can be uniformly radiated and received along the line, covering the blind area of the electromagnetic field, and achieving the purpose of smooth mobile communication.

### Application :

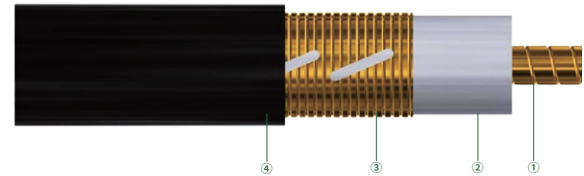
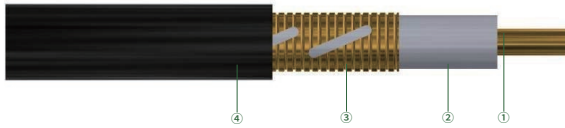
1. Mobile communications in buildings, tunnels and subways (GSM, PCN/PCS, DECT...)
2. Communications in underground buildings, such as parking lots, basements and mines
3. Transmission of FM band (88-108MHz) information in highway tunnels
4. Forwarding of wireless alarm signals in highway tunnels
5. Transmission of mobile phone signals in highway tunnels
6. Signal transmission in subways or subway tunnels

### 1/2" C

### 7/8" C

### 1-1/4" C

### 1-5/8" C



| Construction Specification (mm) |  | 1/2" C     | 7/8" C     | 1-1/4" C   | 1-5/8" C   |
|---------------------------------|--|------------|------------|------------|------------|
| ① Inner Conductor               | 1/2" C: Copper Clad Aluminum<br>7/8" C: Smooth Copper Tube<br>1-1/4" C, 1-5/8" C: Helical Corrugated Copper Tube | 4.80±0.05  | 9.30±0.20  | 13.00±0.20 | 17.80±0.30 |
| ② Dielectric                    | Foam PE  | 12.30±0.20 | 22.80±0.30 | 32.50±0.30 | 42.80±0.30 |
| ③ Outer Conductor               | Overlapping Copper Foil  | 13.00±0.40 | 23.50±0.50 | 33.20±0.50 | 43.80±0.50 |
| ④ Jacket                        | PE or LSZH   | 15.50±0.40 | 27.00±0.50 | 37.20±0.50 | 47.60±0.50 |

| Electrical Characteristics & Mechanical and Environmental Characteristics |               |           |           |           |           |
|---|---------------|-----------|-----------|-----------|-----------|
| Characteristic Impedance(Ω)   |               | 50±2      | 50±2      | 50±2      | 50±2      |
| Velocity of Propagation(%)  |               | 88        | 89        | 89        | 89        |
| Capacitance(pF/m)   |               | 76.0      | 75.0      | 75.0      | 75.0      |
| Insulation Resistance,min(MΩ·km)  |               | 10000     | 10000     | 10000     | 10000     |
| Jacket Spark Test Voltage [KV(AC)]  |               | 8         | 8         | 10        | 10        |
| Insulation Voltage [KV(DC, 1min)]   |               | 6         | 10        | 10        | 15        |
| Operating Frequency(MHz)  |               | 5-2700    | 5-2700    | 5-2700    | 5-2700    |
| Optimum Operating Frequency(MHz)  |               | 700-2700  | 700-2700  | 700-2700  | 700-2700  |
| Forbidden Operating Frequency(MHz)  |               | 1085-1150 | 1085-1150 | 1085-1150 | 1085-1150 |
|   |               | 2170-2300 | 2170-2300 | 2170-2300 | 2170-2300 |
| VSWR Max  | 75-150 MHz    | 1.30      | 1.30      | 1.30      | 1.30      |
|   | 300-500 MHz   | 1.30      | 1.30      | 1.30      | 1.30      |
|   | 800-960 MHz   | 1.30      | 1.30      | 1.30      | 1.30      |
|   | 1700-2025 MHz | 1.40      | 1.30      | 1.30      | 1.30      |
|   | 2110-2170 MHz | 1.40      | 1.30      | 1.30      | 1.30      |
|   | 2300-2400 MHz | 1.40      | 1.30      | 1.30      | 1.30      |
| Single Bending Radius(mm)   |               | 75        | 150       | 200       | 400       |
| Repeated Bending Radius(mm)   |               | 150       | 250       | 400       | 500       |
| Bending Torque(N·M)   |               | 13.5      | 14.9      | 15.5      | 16.0      |
| Tensile Strength(N)   |               | 1000      | 1490      | 1550      | 3300      |
| Recommended Fixed Distance(m)   |               | 0.8-1     | 0.8-1     | 0.8-1     | 0.8-1     |
| Distance to Wall min(mm)  |               | 50        | 50        | 50        | 50        |
| Installation Temperature(°C)  | PE            | -40~+60   | -40~+60   | -40~+60   | -40~+60   |
|   | LSZH          | -20~+60   | -20~+60   | -20~+60   | -20~+60   |
| Operating Temperature(°C)   | PE            | -55~+85   | -55~+85   | -55~+85   | -55~+85   |
|   | LSZH          | -30~+80   | -30~+80   | -30~+80   | -30~+80   |

| Attenuation(dB/100m) & Coupling Loss(2m,50%/95%) @ 20°C |      |       |      |       |     |       |     |       |
|---|------|-------|------|-------|-----|-------|-----|-------|
| Frequency, MHz  | dB   |       | dB   |       | dB  |       | dB  |       |
| 75  | /    | /     | 1.1  | 64/75 | 0.7 | 62/73 | 0.6 | 62/73 |
| 100   | /    | /     | 1.2  | 60/70 | 0.8 | 58/68 | 0.7 | 58/68 |
| 150   | /    | /     | 1.5  | 66/78 | 1.0 | 64/74 | 0.9 | 64/74 |
| 350   | /    | /     | 2.4  | 76/88 | 1.6 | 76/88 | 1.3 | 76/90 |
| 450   | /    | /     | 2.8  | 82/89 | 1.9 | 80/90 | 1.5 | 78/88 |
| 800   | 7.2  | 69/73 | 3.8  | 71/74 | 2.6 | 71/74 | 2.1 | 70/73 |
| 900   | 7.7  | 68/72 | 4.1  | 69/72 | 2.8 | 69/72 | 2.3 | 69/72 |
| 960   | 8.3  | 68/71 | 4.3  | 69/71 | 2.9 | 68/71 | 2.4 | 68/71 |
| 1800  | 11.5 | 65/68 | 6.5  | 64/68 | 4.5 | 64/68 | 3.6 | 64/68 |
| 1900  | 12.3 | 66/68 | 6.9  | 64/68 | 4.7 | 64/68 | 3.9 | 63/68 |
| 2000  | 12.8 | 67/70 | 7.2  | 63/67 | 5.0 | 63/67 | 4.1 | 63/67 |
| 2100  | /    | /     | 7.5  | 63/68 | 5.2 | 63/68 | 4.3 | 63/68 |
| 2400  | 15.5 | 63/66 | 8.5  | 62/66 | 6.2 | 62/66 | 5.0 | 62/66 |
| 2600  | 16.1 | 64/67 | 8.9  | 61/65 | 7.0 | 61/65 | 5.6 | 61/65 |
| 2620  | 17.2 | 65/68 | 9.4  | 62/66 | 7.2 | 61/65 | 5.8 | 61/65 |
| 2700  | 18.0 | 65/69 | 10.5 | 62/66 | 7.6 | 62/66 | 6.3 | 60/66 |

### 1/2"D      7/8"D      1-1/4"D      1-5/8"D



| Construction Specification (mm) |  | 1/2"D      | 7/8"D      | 1-1/4"D    | 1-5/8"D    |
|---------------------------------|--|------------|------------|------------|------------|
| ① Inner Conductor               | 1/2"D: Copper Clad Aluminum<br>7/8"D: Smooth Copper Tube<br>1-1/4"D, 1-5/8"D: Helical Corrugated Copper Tube | 4.80±0.05  | 9.30±0.20  | 13.00±0.20 | 17.80±0.30 |
| ② Dielectric                    | Foam PE  | 12.30±0.20 | 22.80±0.30 | 32.50±0.30 | 42.80±0.30 |
| ③ Outer Conductor               | Overlapping Copper Foil  | 13.00±0.40 | 23.50±0.50 | 33.20±0.50 | 43.80±0.50 |
| ④ Jacket                        | PE or LSZH   | 15.50±0.40 | 27.00±0.50 | 37.20±0.50 | 47.60±0.50 |

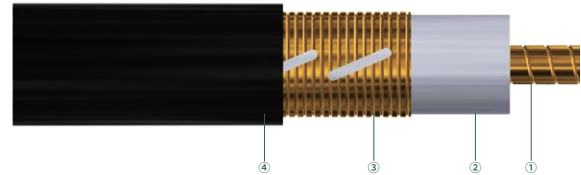
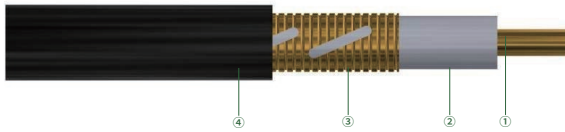
| Electrical Characteristics & Mechanical and Environmental Characteristics |            |         |         |         |         |
|---|------------|---------|---------|---------|---------|
| Characteristic Impedance(Ω)   |            | 50±2    | 50±2    | 50±2    | 50±2    |
| Velocity of Propagation(%)  |            | 86      | 89      | 89      | 89      |
| Capacitance(pF/m)   |            | 76.0    | 75.0    | 75.0    | 75.0    |
| Insulation Resistance,min(MΩ•km)  |            | 10000   | 10000   | 10000   | 10000   |
| Jacket Spark Test Voltage [KV(AC)]  |            | 8       | 8       | 10      | 10      |
| Insulation Voltage [KV(DC, 1min)]   |            | 6       | 10      | 10      | 15      |
| Operating Frequency(MHz)  |            | 5-960   | 5-1000  | 5-1000  | 5-1000  |
| Optimum Operating Frequency(MHz)  |            | 350-960 | 300-960 | 300-960 | 300-960 |
| Forbidden Operating Frequency(MHz)  |            | 250-270 | 250-280 | 250-280 | 250-280 |
|   |            | 500-540 | 500-560 | 500-560 | 500-560 |
|   |            | 750-806 | 750-806 | 750-806 | 750-806 |
| VSWR Max  | 75-150 MHz | 1.30    | 1.30    | 1.30    | 1.30    |
|   | 300-500MHz | 1.30    | 1.30    | 1.30    | 1.30    |
|   | 700-960MHz | 1.30    | 1.30    | 1.30    | 1.30    |
| Single Bending Radius(mm)   |            | 75      | 150     | 200     | 400     |
| Repeated Bending Radius(mm)   |            | 150     | 250     | 400     | 500     |
| Bending Torque(N•M)   |            | 13.5    | 14.9    | 15.5    | 16.0    |
| Tensile Strength(N)   |            | 1000    | 1490    | 1550    | 3300    |
| Recommended Fixed Distance(m)   |            | 0.8-1   | 0.8-1   | 0.8-1   | 0.8-1   |
| Distance to Wall min(mm)  |            | 50      | 50      | 50      | 50      |
| Installation Temperature(°C)  | PE         | -40~+60 | -40~+60 | -40~+60 | -40~+60 |
|   | LSZH       | -20~+60 | -20~+60 | -20~+60 | -20~+60 |
| Operating Temperature(°C)   | PE         | -55~+85 | -55~+85 | -55~+85 | -55~+85 |
|   | LSZH       | -30~+80 | -30~+80 | -30~+80 | -30~+80 |

| Attenuation(dB/100m) & Coupling Loss(2m,50%/95%) @ 20°C |     |       |     |       |     |       |     |       |
|---|-----|-------|-----|-------|-----|-------|-----|-------|
| Frequency, MHz  | dB  |       | dB  |       | dB  |       | dB  |       |
| 75  | 2.1 | 69/75 | 1.3 | 60/70 | 0.8 | 61/70 | 0.6 | 63/72 |
| 100   | /   | /     | 1.6 | 64/75 | 0.9 | 60/68 | 0.7 | 60/70 |
| 150   | 3.1 | 70/80 | 1.9 | 63/73 | 1.1 | 62/72 | 0.9 | 66/76 |
| 350   | 4.7 | 65/68 | 3.0 | 62/65 | 1.9 | 67/72 | 1.4 | 65/69 |
| 450   | 5.6 | 59/62 | 3.5 | 65/70 | 2.2 | 68/71 | 1.6 | 67/70 |
| 800   | 7.4 | 68/75 | 4.7 | 60/62 | 3.2 | 62/64 | 2.4 | 59/62 |
| 900   | 7.8 | 62/66 | 5.0 | 58/61 | 3.6 | 58/61 | 2.7 | 58/60 |
| 960   | 8.2 | 66/73 | 5.3 | 58/60 | 3.9 | 58/62 | 2.9 | 59/61 |

### 1/2"H

### 7/8"H

### 1-1/4"H



| Construction Specification (mm) |   | 1/2"H      | 7/8"H      | 1-1/4"H    |
|---------------------------------|---|------------|------------|------------|
| ① Inner Conductor               | 1/2"H: Copper Clad Aluminum<br>7/8"H: Smooth Copper Tube<br>1-1/4"H: Helical Corrugated Copper Tube | 4.80±0.05  | 9.30±0.20  | 13.00±0.20 |
| ② Dielectric                    | Foam PE   | 12.30±0.20 | 22.80±0.30 | 32.50±0.30 |
| ③ Outer Conductor               | Overlapping Copper Foil   | 13.00±0.40 | 23.50±0.50 | 33.20±0.50 |
| ④ Jacket                        | PE or LSZH  | 15.50±0.40 | 27.00±0.50 | 37.20±0.50 |

| Electrical Characteristics & Mechanical and Environmental Characteristics |               |           |           |           |
|---|---------------|-----------|-----------|-----------|
| Characteristic Impedance(Ω)   |               | 50±2      | 50±2      | 50±2      |
| Velocity of Propagation(%)  |               | 88        | 89        | 89        |
| Capacitance(pF/m)   |               | 76.0      | 75.0      | 75.0      |
| Insulation Resistance,min(MΩ·km)  |               | 10000     | 10000     | 10000     |
| Jacket Spark Test Voltage [KV(AC)]  |               | 8         | 8         | 8         |
| Insulation Voltage [KV(DC, 1min)]   |               | 6         | 10        | 10        |
| Operating Frequency(MHz)  |               | 5-3600    | 5-3600    | 5-3600    |
| Optimum Operating Frequency(MHz)  |               | 800-3600  | 800-3600  | 800-3600  |
| Forbidden Operating Frequency(MHz)  |               | 1220-1250 | 1220-1250 | 1220-1250 |
|   |               | 2400-2500 | 2400-2500 | 2400-2500 |
| VSWR Max  | 75-150 MHz    | 1.30      | 1.30      | 1.30      |
|   | 300-500 MHz   | 1.30      | 1.30      | 1.30      |
|   | 800-960 MHz   | 1.30      | 1.30      | 1.30      |
|   | 1700-2025 MHz | 1.40      | 1.30      | 1.30      |
|   | 2110-2170 MHz | 1.40      | 1.30      | 1.30      |
|   | 2300-2400 MHz | 1.40      | 1.30      | 1.30      |
|   | 2500-2700 MHz | 1.40      | 1.30      | 1.30      |
| Single Bending Radius(mm)   |               | 75        | 150       | 150       |
| Repeated Bending Radius(mm)   |               | 150       | 250       | 250       |
| Bending Torque(N·M)   |               | 13.5      | 14.9      | 14.9      |
| Tensile Strength(N)   |               | 1000      | 1490      | 1490      |
| Recommended Fixed Distance(m)   |               | 0.8-1     | 0.8-1     | 0.8-1     |
| Distance to Wall min(mm)  |               | 50        | 50        | 50        |
| Installation Temperature(°C)  | PE            | -40~+60   | -40~+60   | -40~+60   |
|   | LSZH          | -20~+60   | -20~+60   | -20~+60   |
| Operating Temperature(°C)   | PE            | -55~+85   | -55~+85   | -55~+85   |
|   | LSZH          | -30~+80   | -30~+80   | -30~+80   |

| Attenuation(dB/100m) & Coupling Loss(2m,50%/95%) @ 20°C |      |       |      |       |      |       |
|---|------|-------|------|-------|------|-------|
| Frequency, MHz  | dB   |       | dB   |       | dB   |       |
| 800   | 7.2  | 75/82 | 3.9  | 76/81 | 2.7  | 76/80 |
| 900   | 7.7  | 73/78 | 4.2  | 72/76 | 2.9  | 72/76 |
| 960   | 8.2  | 71/75 | 4.3  | 70/75 | 3.1  | 70/75 |
| 1800  | 11.3 | 67/72 | 6.6  | 67/72 | 4.5  | 67/70 |
| 1900  | 12.1 | 67/72 | 6.8  | 66/70 | 4.8  | 66/69 |
| 2000  | 12.5 | 66/70 | 7.1  | 65/70 | 5.0  | 65/69 |
| 2100  | /    | /     | 7.3  | 64/68 | 5.3  | 64/68 |
| 2400  | 14.4 | 64/69 | 7.7  | 62/66 | 5.9  | 62/66 |
| 2600  | 16.0 | 62/68 | 9.2  | 62/66 | 6.4  | 62/66 |
| 2620  | 16.2 | 62/68 | 9.4  | 62/66 | 6.6  | 62/66 |
| 2700  | 17.3 | 62/68 | 9.8  | 62/66 | 7.0  | 62/66 |
| 3400  | 21.0 | 60/66 | 13.2 | 60/65 | 9.2  | 61/66 |
| 3500  | 22.0 | 60/66 | 14.5 | 60/66 | 11.2 | 61/66 |
| 3600  | 23.2 | 59/66 | 16.2 | 60/66 | 13.6 | 61/66 |