

# Leaky Coaxial Cable

Specializing in designing, manufacturing cables and providing customized services for our customers



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# 1/2" Radiating Leaky Cable (H Band)

CABLE TYPE: RFXT 1/2"-50H(BHF); HLRCAY(Z)-50-12H

#### Construction

Inner Conductor	coppertube	Ø 4.8 mm
Dielectric	Cellular polyethylene	Ø 12.2 mm
Outer Conductor	Copperfoil	Ø 13.2 mm
Jacket	Black PE or Black LSZH	Ø 15.8 mm
Marking	Brand, cable type, cable ID, meter mark	

#### Electrical Characteristics at +20°C

Characteristic impedance	$50 \pm 2 \Omega$
Velocity	0.88
Capacitance	76 pF/m
Insulation Resistantce	$>$ 5000 M $\Omega$ .km
Insulation Voltage	6000 V
Jacket Spark Test Voltage	8000 V



#### **VSWR**

Frequency (MHz)	VSWR (Max)
790~960	1.30
1700~1900	1.50
1900~2025	
2100~2200	1.40
2300~2500	1.40
2500~2700	

#### MECHANICAL CHARACTERISTICS

Weigh	210kg/km
Maximum pulling force	1000N
Minimum bending radius	
Single bending	125 mm
Repeated bending	350 mm
Operating temperature range	-40~ +80°C
Min. installation temperature	-20°C (PE); -5°C (LSZH)

# Attenuation and Coupling Loss

Frequency (MHZ)	Attenuation dB/100m @20 <b>°C</b>	Coupling Loss (50%/95%) dB
800	7.3	79/84
900	7.9	76/82
1800	14.3	67/70
1900	15.0	67/71
2000	15.7	68/72
2200	16.7	67/71
2400	17.6	67/72
2600	18.6	65/69
2700	18.9	66/70
Note: Attenuation tolerance 5%; Coupling Loss tolerance ±5dB		





# 7/8"Radiating Leaky Cable (H Band)

CABLE TYPE: RFXT 7/8"-50H(BHF); HLRCTY(Z)-50-22H

#### Construction

Inner Conductor	coppertube	Ø 9.0 mm	
Dielectric	Cellular polyethylene	Ø 23.2 mm	
Outer Conductor	Copperfoil	Ø 23.5 mm	
Jacket	Black PE or Black LSZH	Ø 27.5 mm	
Marking	Brand, cable type, cable ID, meter mark		

#### Electrical Characteristics at +20°C

Characteristic impedance	$50 \pm 2 \Omega$
Velocity	0.88
Capacitance	76 pF/m
Insulation Resistantce	$>$ 5000 M $\Omega$ .km
Insulation Voltage	10000 V
Jacket Spark Test Voltage	8000 ∨



#### **VSWR**

Frequency (MHz)	VSWR (Max)
790~960	1.3
1700~1900	1.5
1920~2025	
2110~2200	1.4
2300~2500	1.4
2560~2620	

#### MECHANICAL CHARACTERISTICS

Weigh	500kg/km
Maximum pulling force	1300N
Minimum bending radius	
Single bending	250 mm
Repeated bending	300 mm
Operating temperature range	-40~ +80 <b>°</b> C
Min. installation temperature	-20°C (PE); -5°C (LSZH)

# Attenuation and Coupling Loss

Frequency (MHZ)	Attenuation dB/100m @20 <b>°C</b>	Coupling Loss (50%/95%) dB
700	3.7	77/85
800	4.3	75/80
900	4.7	74/80
960	4.8	69/77
1800	8.8	68/75
1900	8.9	64/70
2000	10.0	67/73
2200	11.5	69/75
2400	13.3	67/73
2600	13.9	63/68
2620	15.1	64/70
Note: Attenuation tolerance 5%; Coupling Loss tole	rance ±5dB	



# 1 1/4" Radiating Leaky Cable (M Band)

CABLE TYPE: RFXT 1 1/4"-50M(BHF); HLRCTCY(Z)-50-32M

#### Construction

Inner Conductor	Coppertube	Ø 13.1 mm
Dielectric	Cellular polyethylene	Ø 33.0 mm
Outer Conductor	Copperfoil	Ø 34.0 mm (Max)
Jacket	Black PE or Black LSZH	Ø 37.5 mm (Max)
Marking	Brand, cable type, cable ID, meter mark	

### Electrical Characteristics at +20℃

Characteristic impedance	50 ± 2 Ω
Velocity	0.88
Capacitance	76 pF/m
Insulation Resistantce	>5000 M Ω .km
Insulation Voltage	15000 V
Jacket Spark Test Voltage	10000 V



#### **VSWR**

Frequency (MHz)	VSWR (Max)
100~200	
320~480	1.3
680~700	1.3
790~960	

#### MECHANICAL CHARACTERISTICS

Weigh	780kg/km
Maximum pulling force	2000N
Minimum bending radius	
Single bending	400 mm
Repeated bending	500 mm
Operating temperature range	<b>-</b> 40~ +80° <b>C</b>
Min. installation temperature	-20°C (PE); -5°C (LSZH)

# Attenuation and Coupling Loss

Frequency (MHZ)	Attenuation dB/100m @20°C	Coupling Loss (50%/95%) dB
75	0.7	61/69
150	1.1	70/79
350	1.8	74/82
450	2.1	71/78
700	2.7	72/80
800	3.0	64/68
900	3.3	64/69
960	3.4	72/80

Note: Coupling Loss tolerance  $\pm 5 dB$ 





# 1 1/4" Radiating Leaky Cable (H Band)

CABLE TYPE: RFXT 1 1/4"-50H(BHF); HLRCTCY(Z)-50-32H

#### Construction

Inner Conductor	coppertube	Ø 13.1 mm
Dielectric	Cellular polyethylene	Ø 33.0 mm
Outer Conductor	Copperfoil	Ø 34.0 mm
Jacket	Black PE or Black LSZH	Ø 37.5 mm
Marking	Brand, cable type, cable ID, meter mark	

# Electrical Characteristics at +20°C

Characteristic impedance	50 ± 2 Ω
Characteristic impedance	30 ± 2 17
Velocity	0.88
Capacitance	76 pF/m
Insulation Resistantce	$>$ 5000 M $\Omega$ .km
Insulation Voltage	10000 V
Jacket Spark Test Voltage	10000 ∨



#### **VSWR**

Frequency (MHz)	VSWR (Max)
790~960	1.30
1700~1900	1.30
1920~2025	
2110~2200	1.40
2300~2500	1.40
2560~2620	

#### MECHANICAL CHARACTERISTICS

Weigh	780kg/km
Maximum pulling force	2000N
Minimum bending radius	
Single bending	400 mm
Repeated bending	500 mm
Operating temperature range	-40~ +80 <b>°</b> C
Min. installation temperature	-20°C (PE); -5°C (LSZH)

# Attenuation and Coupling Loss

Frequency (MHZ)	Attenuation dB/100m @20 <b>°C</b>	Coupling Loss (50%/95%) dB
700	2.3	76/82
800	2.7	71/78
900	3.1	69/73
960	3.2	65/68
1800	5.0	66/72
1900	5.6	62/68
2000	5.8	67/72
2200	6.2	66/72
2400	7.8	64/71
2600	8.0	69/76
2620	8.3	68/76
Note: Attenuation tolerance 5%; Coupling Loss tolera	ance ±5dB	



# 1 5/8" Radiating Leaky Cable (M Band)

CABLE TYPE: RFXT 1 5/8"-50M(BHF); HLRHTCY(Z)-50-42M

#### Construction

Inner Conductor	Corrugated copper tube	Ø 17.3±0.3 mm
Dielectric	Cellular polyethylene	Ø 43.0 mm
Outer Conductor	Copperfoil	Ø 44.5 mm (Max)
Jacket	Black PE or Black LSZH	Ø 49.0 mm (Max)
Marking	Brand, cable type, cable ID, meter mark	

#### Electrical Characteristics at +20℃

Characteristic impedance	50 ± 2 Ω
Velocity	0.88
Capacitance	76 pF/m
Insulation Resistantce	>5000 M Ω .km
Insulation Voltage	15000 V
Jacket Spark Test Voltage	10000 V



#### **VSWR**

Frequency (MHz)	VSWR (Max)
100~200	
320~480	1.30
680~700	1.30
790~960	

#### MECHANICAL CHARACTERISTICS

Weigh	1000kg/km
Maximum pulling force	2500N
Minimum bending radius	
Single bending	500 mm
Repeated bending	700 mm
Operating temperature range	-40~ +80°C
Min. installation temperature	-20°C (PE); -5°C (LSZH)

# Attenuation and Coupling Loss

Frequency (MHZ)	Attenuation dB/100m @20°C	Coupling Loss (50%/95%) dB
75	0.6	67/75
150	1.0	71/77
350	1.6	67/75
450	1.8	68/75
700	2.1	64/69
800	2.7	63/71
900	2.9	65/72
960	3.0	60/66

Note: Coupling Loss tolerance ±5dB





# 1 5/8" Radiating Leaky Cable (H Band)

CABLE TYPE: RFXT 1 5/8"-50H(BHF); HLRHTCY(Z)-50-42H

#### Construction

Inner Conductor	Corrugated copper tube	Ø 17.3±0.3 mm
Dielectric	Cellular polyethylene	Ø 43.0 mm
Outer Conductor	Copperfoil	Ø 44.5 mm (Max)
Jacket	Black PE or Black LSZH	Ø 49.0 mm (Max)
Marking	Brand, cable type, cable ID, meter mark	

#### Electrical Characteristics at +20℃

Characteristic impedance	$50 \pm 2 \Omega$
Velocity	0.88
Capacitance	76 pF/m
Insulation Resistantce	$>$ 5000 M $\Omega$ .km
Insulation Voltage	15000 V
Jacket Spark Test Voltage	10000 V



#### **VSWR**

Frequency (MHz)	VSWR (Max)	
790~960	1.30	
1700~1900		
1920~2025	1.40	
2110~2200		
2300~2500		
2560~2620		

#### MECHANICAL CHARACTERISTICS

Weigh	1000kg/km	
Maximum pulling force	2500N	
Minimum bending radius		
Single bending	500 mm	
Repeated bending	700 mm	
Operating temperature range	-40~ +80°C	
Min. installation temperature	-20°C (PE); -5°C (LSZH)	

# Attenuation and Coupling Loss

Frequency (MHZ)	Attenuation dB/100m @20°C	Coupling Loss (50%/95%) dB
700	2.3	73/78
800	2.4	65/75
900	2.6	65/74
960	2.7	65/69
1800	4.3	62/67
1900	4.6	62/68
2000	4.9	63/66
2200	5.5	62/66
2400	6.3	60/65
2600	7.3	60/63
2620	8.1	61/65
Note: Coupling Loss tolerance +5dB		

50 Ohm Coaxial Cable -



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