

Construction

Inner Conductor	Material	CCA
	Diameter, mm	4.80±0.05
Dielectric	Material	Foamed PE
	Diameter, mm	12.2±0.2
Outer Conductor	Material	Annular Corrugated Copper Tube
	Diameter, mm	13.8±0.15
Jacket	Material	LLDPE
	Min. thickness, mm	0.8
	Diameter, mm	15.8±0.2



Electrical Component

Inner conductor DC resistance, Ω/km	≤1.6
Outer conductor DC resistance, Ω/km	≤3.25
Characteristic impedance, Ω	50±1.5
Capacitance, pF/m	76±2
Velocity, %	85
DC Durable Voltage, kV	4.0
Insulation resistance, MΩ/km	>1×10 ⁴

Ordering Information

STF50-LSZH-1/2	Black 50 Ohm Standard/Annular 1/2" Cable
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Applications

- High Power Rating
- Outstanding Intermodulation Performance
- Low VSWR contributes to low system noise
- Long term operating life at high transmit power levels
- Low Attenuation - results in highly efficient signal transfer
- Outstanding heat transfer properties and temperature stabilized dielectric materials
- Solid outer conductor creates a continuous RFI/EMI shield to minimize system interference
- Applications - feedlines for broadcast and terrestrial microwave antennas, wireless cellular, PCS and ESMR base stations, cabling of antenna arrays, radio equipment interconnects, OEM jumpers, Main feed transitions, and GPS lines

Attenuation and Average Power

Frequency, MHz	Attenuation, dB/100m	Attenuation, dB/100ft	Average Power Rating, kW
100	2.17	0.66	3.94
150	2.67	0.81	3.17
200	3.10	0.94	2.75
280	3.69	1.12	2.27
450	4.74	1.44	1.80
700	6.01	1.83	1.42
800	6.45	1.97	1.33
900	6.87	2.09	1.25
1000	7.28	2.22	1.18
1500	9.08	2.77	0.95
1800	10.05	3.06	0.86
2000	10.66	3.25	0.81
2100	10.96	3.34	0.79
2200	11.24	3.43	0.77
2300	11.54	3.52	0.75
2400	11.80	3.60	0.75
2500	12.08	3.68	0.73
2600	12.36	3.77	0.71
3000	12.39	4.08	0.65
3400	14.40	4.39	0.60
3500	14.66	4.47	0.59
3700	15.12	4.61	0.58
4000	15.82	4.82	0.55
5000	18.01	5.49	0.48
6000	20.05	6.11	0.43
8000	23.83	7.26	0.37
8800	25.25	7.70	0.34

Mechanical Characteristics

Bending Radius, mm	Single Bend	80
	Repeated Bend	125
Tensile Strength, N		1000
Cable weight, kg/km		180
Recommended Temperature, °C	Storage	-45~+85
	Installation	-45~+85
	Operating	-45~+85

Return Loss, VSWR

800MHz~1000MHz ≤ 1.10
1700MHz~1900MHz ≤ 1.13
1900MHz~2200MHz ≤ 1.13
2200MHz~2500MHz ≤ 1.15
2500MHz~2700MHz ≤ 1.15

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.