





# Cat6 4PR x 23AWG S/FTP LSZH-SHF1

SHIPCAT6SCR **Part Number:** 

**Applications:** Offshore installations, Maritime Environment, Indoor

use, fixed installations, High data rates, Ships, High

speed & Light craft

Category 6, S/FTP, SHF1 marine type cable constructed **General Construction:** 

with 4 individually foil-shielded twisted pairs with solid conductors, cabled together, overall braid-shield and

The cable is certified by DNV / DNV-GL FILE NO. E-13122 and by ABS FILE NO. 14-GE1164406-1.

**Outer Jacket Material:** FR-LSZH **Outer Diameter:** 7.9 mm nom. Weight: 70 kg/km



## Design & Materials

#### **Detailed Construction:**

(\*) Cable outer jacket is black, for other optional colors please contact marketing personal. **Conductor Material:**Annealed Bare Copper

Annealed Bare Copper

**Conductor Size:** 23 AWG **Conductor Construction:** Solid **Insulation Material:** Cellular PO Insulation O.D.: 1.38 mm nom. Conductor unit identification: Solid Color Color code: Per TIA/EIA 568-B Ind. Shield Material: Aluminum/Polyester Foil

Ind. Shield Design: Helically applied Aluminum foil, 100% coverage

Conductor unit lay-up: Overall Shield Design: Braid

**Overall Braid Material:** Annealed Tinned Copper 55 % nom. **Braid Coverage:** 

**Overall Drain-wire Material:** Annealed Tinned Copper

**Overall Drain-wire size:** 0.41 mm **Overall Drain-wire Construction:** Solid Total number of conductors: **Outer Jacket Color:** Black Marking: Per request,

### Standards

Applicable Standards:	IEC 60092-359, IEC 60092-350, IEC 61156-5, IEEE 802.3at (PoE+), ISO/IEC 11801, RoHS-2 2011/65/EU
Flamability Rating:	IEC 60332-1, IEC 60332-3-22, IEC 60332-3, IEC 60754-2, IEC 61034-1/2, UL 1581 VW-1

**Electrical Properties:** 

	Electrical Properties.											
Freq. MHz	dB/1 20	00m °C	PS NEXT Loss dB		NEXT Loss dB		RL dB		PS ELFEXT dB		ELFEXT dB	
	Typical Value	Cat. 6	Typical Value	Cat. 6	Typical Value	Cat. 6	Typical Value	Cat. 6	Typical Value	Cat. 6	Typical Value	Cat. 6
1	2.0	2.8	90.0	72.3	93.0	75.3	22.0	20.0	90.0	65.0	93.0	68.0
4	3.7	3.8	85.0	63.3	88.0	66.3	25.0	23.0	90.0	53.0	93.0	56.0
10	5.7	6.0	85.0	57.3	88.0	60.4	28.0	25.0	80.0	45.0	83.0	48.0
20	8.1	8.5	85.0	52.8	88.0	55.8	28.0	25.0	80.0	39.0	83.0	42.0
30	10.0	10.5	85.0	50.1	88.0	53.1	27.0	23.8	70.0	35.5	73.0	38.5
100	19.0	19.9	80.0	42.3	83.0	45.3	24.0	21.1	63.0	25.0	66.0	28.0
150	23.6	24.9	80.0	39.7	83.0	42.7	22.0	18.8	60.0	21.5	63.0	24.5
200	27.7	29.1	80.0	37.8	83.0	40.8	21.0	18.0	58.0	19.0	61.0	22.0
250	31.4	33.0	77.0	36.3	80.0	39.3	20.0	17.3	55.0	17.0	58.0	20.0



## Performance

Frequency Range:	1 - 250 MHz
Impedance:	100 Ω
Transfer Impedance:	Grade 1
Coupling Attenuation:	Type I
DC Resistance:	73 $\Omega$ /km nom.
Max. Resistance Unbalance:	2 %
Capacitance Unbalance:	1.2 pF/m max.
Velocity of Propagation:	78 % nom.
Propagation Delay Skew:	25 ns/100m max.
Dielectric Strength:	700 V/minute
Dielectric Strength to Shield:	700 V/minute
Min. Insulation Resistance:	5 GΩ •km
Tensile Strength - Short Term:	130 N max.
Min. Bend Radius:	80 mm
Max. Operating Temperature:	+ 85 °C
Min. Operating Temperature:	- 40 °C
UV resistance:	Yes
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<sup>\*</sup>Supplied cables meet the minimum Cat. 6 transmission requirements as per IEC 61156-5 Ed. 2